1. Record Nr. UNINA990002020750403321

Autore	Zahradnik, Jiri
Titolo	Schildlause unserer gewachshauser. / Jiri Zahradnik
Pubbl/distr/stampa	Wittenberg : A. Ziemsen, 1968
Descrizione fisica	44 p. ; 20 cm
Disciplina	595.752
Locazione	DAGEN
Collocazione	61 IV F.2/54
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910154942503321

Autore	Giancoli Douglas C.
Titolo	Physics : principles with applications / / Douglas C. Giancoli
Pubbl/distr/stampa	Harlow, England : , : Pearson, , [2016] ©2016
ISBN	9781292066851 (electronic book)
Edizione	[Global edition.]
Descrizione fisica	1 online resource (1,058 pages) : illustrations
Disciplina	530
Soggetti	Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover -- Contents -- Applications List -- Preface -- Dedication -- To Students -- Use of color -- Chapter 1: Introduction, Measurement, Estimating -- 1-1 The Nature of Science -- 1-2 Physics and its Relation to Other Fields -- 1-3 Models, Theories, and Laws -- 1-4 Measurement and Uncertainty -- Significant Figures -- Uncertainty -- Significant Figures -- Scientific Notation -- Percent Uncertainty vs.

Significant Figures -- Approximations -- Accuracy vs. Precision -- 1-5 Units, Standards, and the SI System -- Length -- Time -- Mass -- Unit Prefixes -- Systems of Units -- Base vs. Derived Quantities -- 1-6 Converting Units -- 1-7 Order of Magnitude: Rapid Estimating -- A Harder Example-But Powerful -- 1-8 Dimensions and Dimensional Analysis -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 2: Describing Motion: Kinematics in One Dimension -- 2-1 Reference Frames and Displacement -- 2-2 Average Velocity -- 2-3 Instantaneous Velocity -- 2-4 Acceleration -- Deceleration -- 2-5 Motion at Constant Acceleration -- 2-6 Solving Problems -- 2-7 Freely Falling Objects -- Additional Example-Using the Quadratic Formula -- 2-8 Graphical Analysis of Linear Motion -- Velocity as Slope -- Slope and Acceleration -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 3: Kinematics in Two Dimensions -- Vectors -- 3-1 Vectors and Scalars -- 3-2 Addition of Vectors-Graphical Methods -- 3-3 Subtraction of Vectors, and Multiplication of a Vector by a Scalar -- 3-4 Adding Vectors by Components -- Components -- Adding Vectors -- 3-5 Projectile Motion -- 3-6 Solving Projectile Motion Problems -- Level Horizontal Range -- 3-7 Projectile Motion Is Parabolic -- 3-8 Relative Velocity -- Summary -- Questions -- MisConceptual Questions -- Problems.

General Problems -- Search and Learn -- Chapter 4: Dynamics: Newton's Laws of Motion -- 4-1 Force -- 4-2 Newton's First Law of Motion -- Inertial Reference Frames -- 4-3 Mass -- 4-4 Newton's Second Law of Motion -- 4-5 Newton's Third Law of Motion -- 4-6 Weight-the Force of Gravity -- and the Normal Force -- 4-7 Solving Problems with Newton's Laws: Free-Body Diagrams -- Tension in a Flexible Cord -- 4-8 Problems Involving Friction, Inclines -- Friction -- Inclines -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 5: Circular Motion -- Gravitation -- 5-1 Kinematics of Uniform Circular Motion -- 5-2 Dynamics of Uniform Circular Motion -- 5-3 Highway Curves: Banked and Unbanked -- 5-4 Non uniform Circular Motion -- 5-5 Newton's Law of Universal Gravitation -- 5-6 Gravity Near the Earth's Surface -- 5-7 Satellites and "Weightlessness" -- Satellite Motion -- Weightlessness -- 5-8 Planets, Kepler's Laws, and Newton's Synthesis -- Kepler's Laws -- Kepler's Third Law Derived, Sun's Mass, Perturbations -- Other Centers for Kepler's Laws -- Distant Planetary Systems -- Newton's Synthesis -- Sun/Earth Reference Frames -- 5-9 Moon Rises an Hour Later Each Day -- 5-10 Types of Forces in Nature -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 6: Work and Energy -- 6-1 Work Done by a Constant Force -- 6-2 Work Done by a Varying Force -- 6-3 Kinetic Energy, and the Work-Energy Principle -- 6-4 Potential Energy -- Gravitational Potential Energy -- Potential Energy Defined in General -- Potential Energy of Elastic Spring -- Potential Energy as Stored Energy -- 6-5 Conservative and Nonconservative Forces -- Work-Energy Extended -- 6-6 Mechanical Energy and Its Conservation -- 6-7 Problem Solving Using Conservation of Mechanical Energy.

6-8 Other Forms of Energy and Energy Transformations -- The Law of Conservation of Energy -- 6-9 Energy Conservation with Dissipative Forces: Solving Problems -- Work-Energy versus Energy Conservation -- 6-10 Power -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 7: Linear Momentum -- 7-1 Momentum and Its Relation to Force -- 7-2

Conservation of Momentum -- 7-3 Collisions and Impulse -- 7-4 Conservation of Energy and Momentum in Collisions -- 7-5 Elastic Collisions in One Dimension -- 7-6 Inelastic Collisions -- 7-7 Collisions in Two Dimensions -- 7-8 Center of Mass (CM) -- 7-9 CM for the Human Body -- 7-10 CM and Translational Motion -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 8: Rotational Motion -- 8-1 Angular Quantities -- 8-2 Constant Angular Acceleration -- 8-3 Rolling Motion (Without Slipping) -- 8-4 Torque -- Forces that Act to Tilt the Axis -- 8-5 Rotational Dynamics -- Torque and Rotational Inertia -- 8-6 Solving Problems in Rotational Dynamics -- 8-7 Rotational Kinetic Energy -- Work Done by Torque -- 8-8 Angular Momentum and Its Conservation -- 8-9 Vector Nature of Angular Quantities -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 9: Static Equilibrium -- Elasticity and Fracture -- 9-1 The Conditions for Equilibrium -- The First Condition for Equilibrium -- The Second Condition for Equilibrium -- 9-2 Solving Statics Problems -- A More Difficult Example-The Ladder -- 9-3 Applications to Muscles and Joints -- 9-4 Stability and Balance -- 9-5 Elasticity -- Stress and Strain -- Elasticity and Hooke's Law -- Young's Modulus -- Stress and Strain -- Tension, Compression, and Shear Stress -- Volume Change-Bulk Modulus -- 9-6 Fracture.
9-7 Spanning a Space: Arches and Domes -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 10: Fluids -- 10-1 Phases of Matter -- 10-2 Density and Specific Gravity -- 10-3 Pressure in Fluids -- 10-4 Atmospheric Pressure and Gauge Pressure -- Atmospheric Pressure -- Gauge Pressure -- 10-5 Pascal's Principle -- 10-6 Measurement of Pressure -- Gauges and the Barometer -- 10-7 Buoyancy and Archimedes' Principle -- 10-8 Fluids in Motion -- Flow Rate and the Equation of Continuity -- 10-9 Bernoulli's Equation -- 10-10 Applications of Bernoulli's Principle: Torricelli, Airplanes, Baseballs, Blood Flow -- Airplane Wings and Dynamic Lift -- Sailboats -- Baseball Curve -- Lack of Blood to the Brain-TIA -- Other Applications -- 10-11 Viscosity -- 10-12 Flow in Tubes: Poiseuille's Equation, Blood Flow -- 10-13 Surface Tension and Capillarity -- Capillarity -- 10-14 Pumps, and the Heart -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 11: Oscillations and Waves -- 11-1 Simple Harmonic Motion-Spring Oscillations -- 11-2 Energy in Simple Harmonic Motion -- 11-3 The Period and Sinusoidal Nature of SHM -- Period and Frequency-Derivation -- Position as a Function of Time -- Sinusoidal Motion -- Velocity and Acceleration as Functions of Time -- 11-4 The Simple Pendulum -- 11-5 Damped Harmonic Motion -- 11-6 Forced Oscillations -- Resonance -- 11-7 Wave Motion -- 11-8 Types of Waves and Their Speeds: Transverse and Longitudinal -- Speed of Transverse Waves -- Speed of Longitudinal Waves -- Other Waves -- 11-9 Energy Transported by Waves -- Intensity Related to Amplitude and Frequency -- 11-10 Reflection and Transmission of Waves -- 11-11 Interference -- Principle of Superposition -- 11-12 Standing Waves -- Resonance -- 11-13 Refraction.
11-14 Diffraction -- 11-15 Mathematical Representation of a Traveling Wave -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 12: Sound -- 12-1 Characteristics of Sound -- 12-2 Intensity of Sound: Decibels -- Sound Level -- Intensity Related to Amplitude -- 12-3 The Ear and Its Response -- Loudness -- The Ear's Response -- 12-4

Sources of Sound: Vibrating Strings and Air Columns -- Stringed Instruments -- Wind Instruments -- 12-5 Quality of Sound, and Noise -- Superposition -- 12-6 Interference of Sound Waves -- Beats -- Interference in Space -- Beats-Interference in Time -- 12-7 Doppler Effect -- Doppler Effect for Light -- 12-8 Shock Waves and the Sonic Boom -- 12-9 Applications: Sonar, Ultrasound, and Medical Imaging -- Sonar -- Ultrasound Medical Imaging -- Summary -- Questions -- MisConceptual Questions -- Problems -- General Problems -- Search and Learn -- Chapter 13: Temperature and Kinetic Theory -- 13-1 Atomic Theory of Matter -- 13-2 Temperature and Thermometers -- Temperature Scales -- Standard Temperature Scale -- 13-3 Thermal Equilibrium and the Zeroth Law of Thermodynamics -- The Zeroth Law of Thermodynamics -- 13-4 Thermal Expansion -- Linear Expansion -- Volume Expansion -- Anomalous Behavior of Water Below 4°C -- Thermal Stresses -- 13-5 The Gas Laws and Absolute Temperature -- 13-6 The Ideal Gas Law -- 13-7 Problem Solving with the Ideal Gas Law -- 13-8 Ideal Gas Law in Terms of Molecules: Avogadro's Number -- 13-9 Kinetic Theory and the Molecular Interpretation of Temperature -- Kinetic Energy Near Absolute Zero -- 13-10 Distribution of Molecular Speeds -- 13-11 Real Gases and Changes of Phase -- 13-12 Vapor Pressure and Humidity -- Evaporation -- Vapor Pressure -- Boiling -- Partial Pressure and Humidity -- 13-13 Diffusion -- Summary -- Questions.
MisConceptual Questions.

Sommario/riassunto

Elegant, engaging, exacting, and concise, Giancoli's Physics: Principles with Applications, Seventh Edition, helps students view the world through eyes that know physics. Giancoli's text is a trusted classic, known for its elegant writing, clear presentation, and quality of content. Using concrete observations and experiences students can relate to, the text features an approach that reflects how science is actually practiced: it starts with the specifics, then moves to the great generalizations and the more formal aspects of a topic to show students why we believe what we believe. Written with the goal of giving students a thorough understanding of the basic concepts of physics in all its aspects, the text uses interesting applications to biology, medicine, architecture, and digital technology to show students how useful physics is in their own everyday lives and in their future professions.

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Titolo	Marine acoustics : direct and inverse problems / / James L. Buchanan ... [et al.]
Pubbl/distr/stampa	Philadelphia, Pa., : Society for Industrial and Applied Mathematics (SIAM, 3600 Market Street, Floor 6, Philadelphia, PA 19104), 2004
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Descrizione fisica	1 electronic text (xii, 336 p. : ill.) : digital file
Altri autori (Persone)	BuchananJames L
Disciplina	620.2/5
Soggetti	Underwater acoustics
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Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references (p. 299-331) and index.
Nota di contenuto	Preface -- Chapter 1: The Mechanics of Continua -- Chapter 2: Direct Scattering Problems -- Chapter 3: Inverse Scattering in Ocean Environments -- Chapter 4: Oceans Over Elastic Basements -- Chapter 5: Shallow Oceans Over Poroelastic Seabeds -- Chapter 6: Homogenization of the Seabed and other Asymptotic Methods -- Index.
Sommario/riassunto	This book presents current research trends in the field of underwater acoustic wave direct and inverse problems. Until very recently, little has been published concerning model-based inversions of the boundaries and material constants of finite-sized targets located either in the water column or the sediments. This text is the first to investigate inverse problems in an ocean environment with a heavy emphasis placed on the description and resolution of the forward scattering problem.