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Nota di contenuto	 MECHANICS 1. Units, Physical Quantities, and Vectors 2. Motion Along a Straight Line 3. Motion in Two or Three Dimensions 4. Newton's Laws of Motion 5. Applying Newton's Laws 6. Work and Kinetic Energy 7. Potential Energy and Energy Conservation 8. Momentum, Impulse, and Collisions 9. Rotation of Rigid Bodies 10. Dynamics of Rotational Motion 11. Equilibrium and Elasticity 12. Fluid Mechanics 13. Gravitation 14. Periodic Motion WAVES/ACOUSTICS 15. Mechanical Waves 16. Sound and Hearing THERMODYNAMICS 17. Temperature and Heat 18. Thermal Properties of Matter 19. The First Law of Thermodynamics 20. The Second Law of Thermodynamics ELECTROMAGNETISM 21. Electric Charge and Electric Field 22. Gauss's Law 23. Electric Potential 24. Capacitance and Dielectrics 25. Current, Resistance, and Electromotive Force 26. Direct-Current Circuits 27. Magnetic Field and Magnetic Forces 28. Sources of Magnetic Field 29. Electromagnetic Induction 30. Inductance 31. Alternating Current 32. Electromagnetic Waves OPTICS 33. The Nature and Propagation of Light 34. Geometric Optics 35. Interference 36.

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	Diffraction MODERN PHYSICS 37. Relativity 38. Photons: Light Waves Behaving as Particles 39. Particles Behaving as Waves 40. Quantum Mechanics I: Wave Functions 41. Quantum Mechanics II: Atomic Structure 42. Molecules and Condensed Matter 43. Nuclear Physics 44. Particle Physics and Cosmology.
Sommario/riassunto	For courses in calculus-based physics. The benchmark for clarity and rigor, influenced by the latest in education research. Since its first edition, University Physics has been revered for its emphasis on fundamental principles and how to apply them. This text is known for its clear and thorough narrative, as well as its uniquely broad, deep, and thoughtful sets of worked examples that provide students with key tools for developing both conceptual understanding and problem- solving skills. The fourteenth edition improves the defining features of the text while adding new features influenced by education research to teach the skills needed by today's students. A focus on visual learning, new problem types, and pedagogy informed by MasteringPhysics metadata headline the improvements designed to create the best learning resource for physics students.