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Titolo	Principles of Mechanics [[electronic resource]] : Fundamental University Physics // by Salma Alrasheed
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Disciplina	531
Soggetti	Mechanics Mechanical engineering Elementary particles (Physics) Quantum field theory Classical Mechanics Mechanical Engineering Elementary Particles, Quantum Field Theory
Lingua di pubblicazione	Inglese
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Nota di contenuto	Units and Vectors -- Kinematics -- Newton's Laws -- Work and Energy -- Impulse, Momentum and Collisions -- System of Particles -- Rotation of Rigid Bodies -- Rolling and Static Equilibrium -- Central Force Motion -- Oscillatory Motion.
Sommario/riassunto	This open access textbook takes the reader step-by-step through the concepts of mechanics in a clear and detailed manner. Mechanics is considered to be the core of physics, where a deep understanding of the concepts is essential in understanding all branches of physics. Many proofs and examples are included to help the reader grasp the fundamentals fully, paving the way to deal with more advanced topics. After solving all of the examples, the reader will have gained a solid foundation in mechanics and the skills to apply the concepts in a variety of situations. The book is useful for undergraduate students majoring in physics and other science and engineering disciplines. It

can also be used as a reference for more advanced levels.
