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Nota di contenuto	Cover; Title Page; Contents; Preface; Preface to the Second Edition; Preface to the First Edition; 1 Introduction; 1.1 Philosophy of this Book; 1.2 Short Reader's Guide; 1.3 Notational Conventions and Choice of Units; Part I: FUNDAMENTALS; 2 Elements of Classical Mechanics and Electrodynamics; 2.1 Elementary Newtonian Mechanics; 2.1.1 Newton's Laws of Motion; 2.1.2 Galilean Transformations; 2.1.2.1 Relativity Principle of Galilei; 2.1.2.2 General Galilean Transformations and Boosts; 2.1.2.3 Galilei Covariance of Newton's Laws; 2.1.2.4 Scalars, Vectors, and Tensors in Three-Dimensional Space 2.1.3 Basic Conservation Laws for One Particle in Three Dimensions 2.1.4 Collection of N Particles; 2.2 Lagrangian Formulation; 2.2.1 Generalized Coordinates and Constraints; 2.2.2 Hamiltonian Principle and Euler-Lagrange Equations; 2.2.2.1 Discrete System of Point Particles; 2.2.2.2 Example: Planar Pendulum; 2.2.2.3 Continuous Systems of Fields; 2.2.3 Symmetries and Conservation Laws; 2.2.3.1 Gauge Transformations of the Lagrangian; 2.2.3.2 Energy and Momentum Conservation; 2.2.3.3 General Space-Time Symmetries; 2.3 Hamiltonian Mechanics; 2.3.1 Hamiltonian Principle and Canonical Equations

2.3.1.1 System of Point Particles 2.3.1.2 Continuous System of Fields; 2.3.2 Poisson Brackets and Conservation Laws; 2.3.3 Canonical Transformations; 2.4 Elementary Electrodynamics; 2.4.1 Maxwell's Equations; 2.4.2 Energy and Momentum of the Electromagnetic Field; 2.4.2.1 Energy and Poynting's Theorem; 2.4.2.2 Momentum and Maxwell's Stress Tensor; 2.4.2.3 Angular Momentum; 2.4.3 Plane Electromagnetic Waves in Vacuum; 2.4.4 Potentials and Gauge Symmetry; 2.4.4.1 Lorenz Gauge; 2.4.4.2 Coulomb Gauge; 2.4.4.3 Retarded Potentials; 2.4.5 Survey of Electro- and Magnetostatics; 2.4.5.1 Electrostatics
2.4.5.2 Magnetostatics 2.4.6 One Classical Particle Subject to Electromagnetic Fields; 2.4.7 Interaction of Two Moving Charged Particles; Further Reading; 3 Concepts of Special Relativity; 3.1 Einstein's Relativity Principle and Lorentz Transformations; 3.1.1 Deficiencies of Newtonian Mechanics; 3.1.2 Relativity Principle of Einstein; 3.1.3 Lorentz Transformations; 3.1.3.1 Definition of General Lorentz Transformations; 3.1.3.2 Classification of Lorentz Transformations; 3.1.3.3 Inverse Lorentz Transformation; 3.1.4 Scalars, Vectors, and Tensors in Minkowski Space
3.1.4.1 Contra and Covariant Components 3.1.4.2 Transformation Properties of Scalars, Vectors, and Tensors; 3.2 Kinematic Effects in Special Relativity; 3.2.1 Explicit Form of Special Lorentz Transformations; 3.2.1.1 Lorentz Boost in One Direction; 3.2.1.2 General Lorentz Boost; 3.2.2 Length Contraction, Time Dilation, and Proper Time; 3.2.2.1 Length Contraction; 3.2.2.2 Time Dilation; 3.2.2.3 Proper Time; 3.2.3 Addition of Velocities; 3.2.3.1 Parallel Velocities; 3.2.3.2 General Velocities; 3.3 Relativistic Dynamics; 3.3.1 Elementary Relativistic Dynamics
3.3.1.1 Trajectories and Relativistic Velocity

Sommario/riassunto

Einstein proposed his theory of special relativity in 1905. For a long time it was believed that this theory has no significant impact on chemistry. This view changed in the 1970's when it was realized that (nonrelativistic) Schrodinger quantum mechanics yields results on molecular properties that depart significantly from experimental results. Especially when heavy elements are involved, these quantitative deviations can be so large that qualitative chemical reasoning and understanding is affected. For this to grasp the appropriate many-electron theory has rapidly evolved. Nowadays relativist...

2. Record Nr. UNINA9910557456203321

Autore	Shaviro Steven
Titolo	Sin criterios : Kant, Whitehead, Deleuze, y la estetica / / Steven Shaviro ; translated by Roman Suarez, Laureano Ralon
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Descrizione fisica	1 online resource (196 pages)
Disciplina	111.85
Soggetti	Aesthetics
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Formato	Materiale a stampa
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Sommario/riassunto	In Without Criteria, Steven Shaviro proposes and explores a philosophical fantasy: imagine a world in which Alfred North Whitehead takes the place of Martin Heidegger. What if Whitehead, instead of Heidegger, had set the agenda for postmodern thought? Heidegger asks, "Why is there something, rather than nothing?" Whitehead asks, "How is it that there is always something new?" In a world where everything from popular music to DNA is being sampled and recombined, argues Shaviro, Whitehead's question is the truly urgent one. Without Criteria is Shaviro's experiment in rethinking postmodern theory, especially the theory of aesthetics, from a point of view that hearkens back to Whitehead rather than Heidegger. In working through the ideas of Whitehead and Deleuze, Shaviro also appeals to Kant, arguing that certain aspects of Kant's thought pave the way for the philosophical "constructivism" embraced by both Whitehead and Deleuze. Kant, Whitehead, and Deleuze are not commonly grouped together, but the juxtaposition of them in Without Criteria helps to shed light on a variety of issues that are of concern to contemporary art and media practices.