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Descrizione fisica	1 online resource (200 p.)
Collana	Advances in Atom and Single Molecule Machines, , 2193-9691
Disciplina	54 541.2 620.5
Soggetti	Nanochemistry Chemistry, Physical and theoretical Nanoscale science Nanoscience Nanostructures Theoretical and Computational Chemistry Nanoscale Science and Technology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	From the Contents: Single Molecule Measurements of Synthetic Molecular Machines at Work -- An Atomistic View of DNA Dynamics and its Interaction with Small Binders: Insights from Molecular Dynamics and Principal Component Analysis -- Recent Advances in the Chemical Synthesis of Lasso Molecular Switches -- Triptycene or Subphthalocyanine Wheels and Polyaromatic Hydrocarbon Nanovehicles.
Sommario/riassunto	This book brings together different approaches and strategies to design, synthesize and study single molecular machines and motors in a multidisciplinary way. Written by leading international experts, this book summarizes the advances in the field through a number of disciplines. Some contributions describe molecular chemistry such as

organic, aromatics, and coordination chemistry while others address theoretical chemistry in a predictive way or through post-experimental modelling. Experimental physics with extensive use of scanning probe microscopy (STM and AFM) is discussed for examining one single molecule. This book is aimed at those who are interested in the rapidly growing field of molecular machines and motors acting and studied at the single-molecule scale. The goal of the authors and editors is to provide the reader with an up-to-date summary while also offering future perspectives on the field.
