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Nota di contenuto	Cluster Radioactivity Coexistence of Cluster States and Mean-Field- Type States Alpha-cluster Condensations in Nuclei and Experimental Approaches for their Studies Cluster Structure of Neutron-Rich Nuclei Studied with Antisymmetrized Molecular Dynamics Model Di- Neutron Clustering and Deuteron-like Tensor Correlation in Nuclear Structure Focusing on 11Li Collective Clusterization in Nuclei and Excited Compound Systems: The Dynamical Cluster-Decay Model Giant Nuclear Systems of Molecular Type.
Sommario/riassunto	Following the pioneering discovery of alpha clustering and of molecular resonances, the field of nuclear clustering is presently one of the domains of heavy-ion nuclear physics facing both the greatest

1.

challenges and opportunities. After many summer schools and workshops, in particular over the last decade, the community of nuclear molecular physics decided to team up in producing a comprehensive collection of lectures and tutorial reviews covering the field. This first volume, gathering seven extensive lectures, covers the follow topics: * Cluster Radioactivity * Cluster States and Mean Field Theories * Alpha Clustering and Alpha Condensates * Clustering in Neutron-rich Nuclei * Di-neutron Clustering * Collective Clusterization in Nuclei * Giant Nuclear Molecules By promoting new ideas and developments while retaining a pedagogical nature of presentation throughout, these lectures will both serve as a reference and as advanced teaching material for future courses and schools in the fields of nuclear physics and nuclear astrophysics.