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Nota di contenuto	Preface -- Microscopic Cluster Models -- Neutron Halo and Breakup Reactions -- Breakup Reaction Models for Two-and Three-Cluster Projectiles -- Clustering Effects Within the Dinuclear Model -- Nuclear Alpha-Particle Condensates -- Clusters in Nuclei: Experimental Perspectives.
Sommario/riassunto	Following the pioneering discovery of alpha clustering and of molecular resonances, the field of nuclear clustering is today one of those domains of heavy-ion nuclear physics that faces the greatest challenges, yet also contains the greatest opportunities. After many summer schools and workshops, in particular over the last decade, the community of nuclear molecular physicists has decided to collaborate in producing a comprehensive collection of lectures and tutorial reviews covering the field. This second volume follows the successful Lect. Notes Phys. 818 (Vol.1), and comprises six extensive lectures covering the following topics: . . . Microscopic cluster models . . . Neutron halo and break-up reactions . . . Break-up reaction models for two- and three-cluster projectiles . . . Clustering effects within the di-nuclear model . . . Nuclear alpha-particle condensates . . . Clusters in nuclei: experimental perspectives By promoting new ideas and developments while retaining a pedagogical style of presentation throughout, these lectures will serve as both a reference

and an advanced teaching manual for future courses and schools in the fields of nuclear physics and nuclear astrophysics.
