Record Nr. UNINA9910820351403321 Proceedings of the International Symposium on Clustering Aspects of **Titolo** Quantum Many-Body Systems: post-symposium of YKIS01, Kyoto, Japan, 12-14 November 2001 / / editors, A. Ohnishi ... [et al.] River Ridge, NJ,: World Scientific, c2002 Pubbl/distr/stampa **ISBN** 1-281-92974-3 9786611929749 981-277-757-1 Edizione [1st ed.] 1 online resource (332 p.) Descrizione fisica Altri autori (Persone) OhnishiA Disciplina 530.144 Soggetti Cluster theory (Nuclear physics) Many-body problem Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "The International Symposium on Clustering Aspects of Quantum Many-Body Systems (POSTYK01) ... as a post symposium of the Yukawa International Seminar on Physics of Unstable Nuclei (YKIS01)"--Pref. Includes bibliographical references. Nota di bibliografia Nota di contenuto ; Symposium Organization Contents Symposium Photograph ; Clustering : Preface in Unstable Nuclei ; Cluster Excitations in 6Li ; Coupled Channel 9Li + n + n Model of 11Li ; Clustering of 8He and 7He Tested by 8He + p Transfer Reactions Evidence for the Di-Triton Resonance in 6He Probing Halo and Molecular States in Light, Neutron-Rich Nuclei6He + 6He Molecular States in Highly-Excited 12Be ; Molecular States in Neutron-Rich Beryllium Isotopes : Analysis of 11Be in the 10Be + n Model Cluster Structure in Hypernuclei : Structure of Light Hypernuclei Studied by Gamma-Ray Spectroscopy Quark-Model Interactions for Complete Baryon Octet Cluster Models of 9Be and 9^Be : Structure of 12^C Hypernucleus in Antisymmetrized Molecular Dynamics ; Three- and Four-Body Structure of Light Double Hypernuclei; Deeply Bound Kaonic Nuclei - Their Strange Density Distributions Clustering Structure in Light to Medium-Heavy Stable Nuclei

Heavy Ion Radiative Capture: A Study of the 12C(12C,y) Reaction Using A Large Germanium Detector Array; 12C + 12C -> 8Beg.s. + 16Og.s. Resonance Reaction and Multi-Cluster States of the Highly Excited 24Mg Nucleus; Resonant Structures in Observed Spin Alignment in the 12C+16O Inelastic Scattering

Barrier-Wave/Internal-Wave Interpretation of Airy Structure in Light Heavy-Ion Elastic Scattering

Double-Folding Potentials for the 16O + 16O System in the Coupled-Channels Framework

; New Information on -cluster States in 12C from the -decay of 12N; Alpha and Di-Neutron Condensation

Alpha Cluster Condensation in 12C and 16O

Sommario/riassunto

This proceedings volume includes all the invited talks and oral presentations at the International Symposium on Clustering Aspects of Quantum Many-Body Systems, 12-14 November 2001, Kyoto, Japan. It discusses various features of clustering aspects - localization of particles in static and dynamical contexts - of nuclear and atomic systems. It also presents many recent theoretical developments in quantum few-body and many-body problems. This book will be useful to graduate students and researchers in the field of quantum many-body problems, especially to those who want to understand the system