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Nota di contenuto	Nuclear structure influences in subbarrier fusion of massive nuclei -- Chaos near the coulomb barrier? — nuclear molecules -- Sub-barrier fusion: Search for experimental signatures by a comparative approach -- Towards a microscopic theory of nuclear barrier penetration -- The role of heavy ion reactions in astrophysics -- Microscopic study of radiative fusion reactions $3\text{He}(?,?)7\text{Be}$ and $3\text{H}(?,?)7\text{Li}$ at astrophysical low ENERGIES -- The effect of shape-isomeric resonances on the $12\text{C}+12\text{C}$ fusion cross section and its representation by a double-minimum optical potential* -- Heavy-ion potentials for strongly deformed nuclei -- Systematics of the fusion cross sections for the p-shell nuclei -- Inversion of sub-barrier fusion data -- Spin distributions in heavy ion fusion at and below the Coulomb barrier -- Comparison between microscopic and non-microscopic studies of radiative capture reactions -- Subbarrier fusion in terms of the direct reaction theory -- Gamma multiplicity moments of Ni + Ni sub-barrier fusion reactions -- Fusion and fission in heavy systems near the barrier -- The coupled channels approach to subbarrier fusion reactions -- Investigation of the effect of

one-neutron transfer reactions on sub-barrier fusion of S-ions with a ?  
100 nuclei -- Sub-barrier fusion - barrier penetration and coupling to  
intrinsic degrees of freedom -- Fingerprints of the nuclear structure in  
tunnelling processes -- Effects of internal degrees of freedom on the  
heavy-ion fusion cross section -- What can we learn from heavy-ion  
sub-barrier fusion excitation functions? -- Radiative fusion induced by  
massive nuclei -- Fission fragment angular distributions in the capture  
reactions  $^{50}\text{Ti}$ ,  $^{56}\text{Fe} + ^{208}\text{Pb}$  -- Probing sub-barrier fusion and extra-  
push by measuring fermium evaporation residues in different heavy ion  
reactions -- Threshold behaviour in the fusion of massive systems --  
Sub-barrier fusion of the systems  $^{28,30}\text{Si} + ^{58,62,64}\text{Ni}$  -- Fusion  
excitation functions at near- and sub-coulomb barrier for symmetric  
and asymmetric medium-mass systems -- The generalized critical  
distance model for systems with mass asymmetry -- A time-dependent  
mean-field theory for prompt nucleon emission in heavy-ion reactions  
-- Sub-barrier fusion of  $^1\text{H}$  and  $^4\text{He}$ : Empirical and theoretical barriers  
for fusion and evaporation -- Fusion with polarized heavy ions --  
Polarization in sub-barrier fusion reactions -- Calibration and initial  
experiments with the ORNL-MIT recoil mass spectrometer -- Sub-  
barrier fusion of  $\text{o} + \text{sn}$  using a new detection system -- Development of  
polarized targets for subbarrier fusion studies -- Subbarrier fusion  
measurements for the system  $^{32}\text{S} + ^{238}\text{U}$  -- Future perspectives —  
experimental.

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