3. TEMPERATURE DEPENDENCE OF THE ISOVECTOR DIPOLE RESPONSE FOR ASYMMETRIC SPHERICAL NUCLEI: A KINETIC-THEORY APPROACH

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Semiclassical approach based on the solution of the vlasov kinetic equation for finite two-component systems with a moving surface is generalized for the study of the isovector dipole response of excited neutron-rich spherical nuclei. the temperature effects are taken into account through the collision integral in the relaxation time approximation. it is shown that, by taking into account the dynamical surface effects, it is possible to obtain an exact treatment of the centre of mass motion for isovector dipole excitations of neutron-proton asymmetric systems. it is found that the width of giant dipole resonance grows with the temperature increase in the approximation of rare collisions between nucleons.