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Difference and Peculiarity of multinucleon transfer in reactions induced by $^{40,48}\text{Ca}$ ions on Au and U targets

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Multinucleon transfer (MNT) reactions induced by $^{40,48}\text{Ca}$ ions on Au target have been studied at 400 MeV bombarding energy. Projectile-like fragments have been identified in nuclear charge, angular and kinetic energy distributions and inclusive cross sections were measured. Two groups of products were identified in: 1) deep-inelastic products, the maximum yield of these products was at forward direction and 2) quasi-elastic with the formation of projectile-like products, with the maximum yield of these products at the grazing angle.

In the reaction $^{48}\text{Ca}+\text{Au}$, for which quasi-elastic dominated, the angular distributions of the products of

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