In this thesis, I describe the main ideas and summarize the results of four refereed papers I contributed to (three times as the second author and once as the first author). The first step of each of these papers was the identification of genetically related asteroid and their membership confirmation. Since members of asteroid pairs and clusters have a very similar heliocentric orbits, we employed and further developed methods based on backward orbital integrations. The chronologically first paper Pravec et al. (2018) deals with asteroid clusters and their similarity to asteroid pairs. The second paper Pravec et al. (2019) is a complex study of 93 asteroid pairs with many interesting results, such as the existence of binary asteroids among asteroid pairs. The third paper Moskovitz et al. (2019) deals with an identification of asteroid pairs in the near-Earth population and a detail study of two probable asteroid pairs. The fourth paper, Fatka et al. (2020), studies the phenomenon of cascade disruption in asteroid clusters, which results in multiple generations (with different ages) of escaped secondaries in some asteroid clusters.