Abstract

Let FC^0 be the class of all finite groups, and for each non-negative integer m define by induction the group class FC^{m+1} consisting of all groups G such that the factor group $G/C_G(\langle x\rangle^G)$ has the property FC^m for all elements x of G. Clearly, FC^1 is the class of FC-groups and every nilpotent group with class at most m belongs to FC^m. In this article the structure of groups with finitely many normalizers of non-FC^m-subgroups (respectively, the structure of groups whose subgroups either are subnormal with bounded defect or have the property FC^m) is investigated.