

Year: 2020

Vol.: 97

Fasc.: 3-4

**Title:** On a new type of products of finite groups

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Let  $G_1$  and  $G_2$  be subgroups of a finite group  $G$ . We say that  $G_1$  and  $G_2$  are totally semipermutable if  $G_1G_2$  is a subgroup of  $G$ , and whenever  $P$  is a Sylow subgroup of  $G_1$  and  $Q$  is a Sylow subgroup of  $G_2$  with  $(|P|, |Q|) = 1$ , we have every subgroup of  $P$  permutes with every subgroup of  $Q$ . In this paper, we study the influence of totally semipermutable subgroups on the structure of finite groups. Our results improve and extend some results in the literature.

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