عنوان مقاله:

A preconditioned Jacobi-type method for solving multi-linear systems

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خلاصه مقاله:

Recently, Zhang et al. [Applied Mathematics Letters ۱۰۴ (۲۰۲۰) ۱۰۶۲۸۷] proposed a preconditioner to improve the convergence speed of three types of Jacobi iterative methods for solving multi-linear systems. In this paper, we consider the Jacobi-type method which works better than the other two ones and apply a new preconditioner. The convergence of proposed preconditioned iterative method is studied. It is shown that the new approach is superior to the recently examined one in the literature. Numerical experiments illustrate the validity of theoretical results and the efficiency of the proposed preconditioner.

کلمات کلیدی:

Iterative method, multi-linear system, strong mathcal{M}-tensor, preconditioning

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