

عنوان مقاله:

Two Settings of the Dai-Liao Parameter Based on Modified Secant Equations

محل انتشار:

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خلاصه مقاله:

Following the setting of the Dai-Liao (DL) parameter in conjugate gradient (CG) methods, we introduce two new parameters based on the modified secant equation proposed by Li et al. (Comput. Optim. Appl. ۲۰۲:۵۲۳-۵۳۹, ۲۰۰۷) with two approaches, which use an extended new conjugacy condition. The first is based on a modified descent three-term search direction, as the descent Hestenes-Stiefel CG method. The second is based on the quasi-Newton (QN) approach. Global convergence of the proposed methods for uniformly convex functions and general functions is proved. Numerical experiments are done on a set of test functions of the CUTEr collection and the results are compared with some well-known methods

کلمات کلیدی:

Unconstrained optimization, Modified secant equations, Dai-Liao conjugate gradient method

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