A New Modification of Nonlinear Conjugate Gradient Coefficients with Global Convergence Properties

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Abstract : Conjugate gradient method has been enormously used to solve large scale unconstrained optimization problems due to the number of iteration, memory, CPU time, and convergence property, in this paper we find a new class of nonlinear conjugate gradient coefficient with global convergence properties proved by exact line search. The numerical results for our new βK give a good result when it compared with well-known formulas.