A new parameterless filled function for global optimization problems. (Chinese. English summary) [Zbl 07404505]
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Summary: Since the filled function algorithm for global optimization problems has been proposed, the selection and adjustment of parameters have always been the factors that restrict the effectiveness of the algorithm. How to select appropriate parameters in the actual calculation process directly affects and determines the operation speed and efficiency. Therefore, constructing a filled function without parameter is extremely important. This paper proposes a new parameterless filled function, and gives the corresponding filled function algorithm. Through numerical experiments and comparison with existing literature, numerical experiments verify the effectiveness of the algorithm.

MSC:
90C26 Nonconvex programming, global optimization
90C30 Nonlinear programming

Keywords:
global optimization; filled function; parameterless; deterministic algorithm

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