Journal of Systems Science and Complexity 1995 8 (3): 203-208 ISSN: 1000-0577 CN: 11-2019/O1

论文

POSITIVE SOLUTIONS FOR DIRICHLET PROBLEMS OF SINGULAR SEMILINEAR ELLIPTIC EQUATIONS

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收稿日期 修回日期 网络版发布日期 接受日期

摘要 This paper studies the existence of solutions of the following problem: where Ω is a bounded domain in Rn with smooth boundary, L is a second order uniformly elliptic linear operator, and f(x, u ε) is a C1 function defined on Ω × (0, +∞)×Rn which may be singular both at μ=0 and at x ∈Ω. By using the upper and lower solutions method combined with the domain approximation method, we prove that under certain conditions this problem has at least one solution.

关键词 Singular semilinear elliptic equation, D

分类号

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Key words Singular semilinear elliptic equation Dirichlet problem positive solution

DOI:

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