

Pokhozhaev, S.

On entire solutions of semilinear elliptic equations. (English) [Zbl 0821.35046](#)

Bandle, C. (ed.) et al., Progress in partial differential equations: elliptic and parabolic problems. Proceedings of the first European conference on elliptic and parabolic problems held in Pont-à-Mousson, France, June 1991. Harlow: Longman Scientific & Technical. Pitman Res. Notes Math. Ser. 266, 56-69 (1992).

Summary: Asymptotic estimates and existence are obtained for solutions of some classes of semilinear elliptic problems in \mathbb{R}^N ($N \geq 3$), including the supercritical Emden-Fowler type in the nonautonomous cases. Our approach differs from well-known ones by the used methods. The first method is based on variational identities. The second method is based on the existence of positive classes of functions for semilinear elliptic operators of second order in the supercritical case.

For the entire collection see [\[Zbl 0782.00049\]](#).

MSC:

[35J60](#) Nonlinear elliptic equations

[35B40](#) Asymptotic behavior of solutions to PDEs

Cited in **2** Documents

Keywords:

supercritical Emden-Fowler equation; integral identities; variational identities