

Existence, nonexistence and multiplicity of positive solutions for an equation with degenerate nonlocal diffusion

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Abstract. An elliptic boundary value problem with degenerate nonlocal term is considered. The existence, nonexistence and multiplicity of positive solutions for the problem are studied. The results are obtained in two different cases: under monotonicity assumptions on the nonlinearity term as well as without monotonicity conditions. Some order in the set of obtained solutions is provided.