

Referee's report on the manuscript
**"Nontrivial weak solutions of a quasilinear equation involving
 p -Laplace operator"**

The paper under review studies the existence of nontrivial solutions for the following problem

$$\begin{cases} -\Delta_p u + |u|^{p-2}u = f(x, u), & x \in \Omega, \\ u = 0, & x \in \partial\Omega \end{cases}$$

where Ω is bounded domain in $\mathbb{R}^N$ ($N \geq 3$) with smooth boundary, $1 < p < N$, f is a continuous function.

After checking this paper carefully, I find that this paper is poorly written and I will point out several major problems.

1. The introduction should be rewritten. In my opinion, the authors should point out why it is needed to study this problem and the main difficulty in obtaining the main results. Moreover, the authors should renew the references to ensure the newest of this paper. Without reading the full article, readers should have a brief idea about: the problem, the past results, the results to be proven in the paper (and possible assumptions), the main difficulty in obtaining the results and the main tools used. However, after reading the introduction of this paper, I find little.

2. The paper should be polished in English writing since there are so many grammar errors. For example, page 1, line 10 from above, "the existence and nontrivial solutions of the following..."; page 1, line 2, 3 from below, "for nonlinearities f which do not necessarily satisfy the classical conditions"; page 2, line 3,4 from above, "The norms that make $L^p(\Omega)$ Banach spaces are, respectively," etc. Moreover, there are some misprinting, for example, page 2, line 17 from above, " $p^* = Np/N - p$ " should be " $p^* = Np/(N - p)$ ". Furthermore, I was told that a recent book (in Chinese) will serve the purpose: <http://product.china-pub.com/3022362>. This book should be a good reference for the authors.

Above all I think this paper needs to be improved.