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## Strongly Nonlinear Elliptic Unilateral Problems in Orlicz Space and $L^1$ Data

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**Abstract:**

In this paper, we shall be concerned with the existence result of Unilateral problem associated to the equations of the form,

$$Au + g(x, u, \nabla u) = f,$$

where  $A$  is a Leray-Lions operator from its domain  $D(A) \subset W_0^1 L_M(\Omega)$

into  $W^{-1} E_{\overline{M}}(\Omega)$ . On the nonlinear lower order term  $g(x, u, \nabla u)$ , we

assume that it is a Carathéodory function having natural growth with respect to  $|\nabla u|$ , and satisfies the sign condition. The right hand side  $f$  belongs to

$L^1(\Omega)$ .



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