Decay of solutions for a viscoelastic wave equation with acoustic boundary conditions

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Abstract

In this report we prove that the hypothesis on the memory term g in \cite% {WenjunYunSun} can be modified to be $g\hat{}\{\prime \}(t)\leq -\zeta (t)g\hat{}\{p\}(t)$% , $t\geq 0,$ $1\leq p<\frac{3}{2}$ where $\zeta (t)$ provides% \begin{equation*} \zeta \left(0\right) >0,\text{ }\zeta \hat{}\{\prime \}(t)\leq 0,\text{ }% \int_{0}\hat{}\{\infty \}\zeta \left(s\right) ds=+\infty . \end{equation*}% So the optimal decay results are extended.

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