Liu, Jun; Liu, Xi; Zhu, Chunyan; Yu, Yuanhong

Study on the oscillation of second order half-linear differential equation. (Chinese. English summary) Zbl 07448818

Summary: The oscillation for a class of second order half-linear differential equations is studied in $\alpha > \beta$ and $\beta \geq \alpha$ cases by using the generalized Riccati transformation. Several sufficient conditions are established for the differential equations. Two examples are given to test the applicability of the results.

MSC:

34C10 Oscillation theory, zeros, disconjugacy and comparison theory for ordinary differential equations

Keywords:

oscillation criteria; half-linear differential equation; Riccati transformation