

Original Articles

Cubic Lienard Equations with Quadratic Damping (I)

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摘要 Applying Hopf bifurcation theory and qualitative theory, we show that the general cubic Lienard equations with quadratic damping have at most three limit cycles. This implies that the guess in which the system has at most two limit cycles is false. We give the sufficient conditions for the system has at most three limit cycles or two limit cycles. We present two examples with three limit cycles or two limit cycles by using numerical simulation.

关键词 [cubic lienard equations](#) [limit cycles](#) [stability](#)

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Cubic Lienard Equations with Quadratic Damping (II)

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Key words [cubic lienard equations](#) [limit cycles](#) [stability](#)

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