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一种基于电流传送器的电流模式N阶滤波器设计

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Design of Current-Mode Nth-Order Filter Based on Current Conveyor

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- 摘要
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摘要 提出了一种基于第2代电流传送器的电流模式N阶滤波电路.该电路由n个电流传送器(CCII+)、3n个无源元件构成，能实现N阶低通、带通、高通滤波功能.以2阶滤波器为例分析了电路的无源、有源灵敏度，分析数据表明无源、有源灵敏度都很低.最后对该电路用Pspice进行了仿真，仿真结果表明该电路设计正确.

关键词: 电流模式   电流传送器   仿真

Abstract: A circuit for current-mode nth-order filter based on CCII+ is presented.Its circuit consists of n current conveyors (CCII+) and 3n passive components,which can realize nth-order high-pass,low-pass and band-pass filter.Passive and active sensitivities of second order filter are analyzed,and both of them are very low.Its circuit is simulated with Pspice,and simulation result shows the design circuit is correct.

Key words: current mode   current conveyor   simulation

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