

## عنوان مقاله:

A Current-Mode Membership Function Generator With Continuous Slop Tunability and Low Power Consumption

## محل انتشار:

بیست و یکمین کنفرانس مهندسی برق ایران (سال: 1392)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

in this paper to multiply or divide the current signals continuously with low power consumption, a simple but effective approach is proposed that is useful in current-mode analog circuits such as membership function generators in fuzzy logic controllers (FLC) and we study the effect of this approach on a typical fuzzifier. Simulation results show that by means of this approach the slope of membership functions can be tunable in an analog range while the power consumption is approximately in its minimum value  $426\mu\text{W}$ . Also the circuit of a novel analog divider is presented which its power consumption is less than conventional dividers. The circuits are designed in  $0.35\mu\text{m}$  CMOS process and the simulations are performed in HSPICE simulator

## کلمات کلیدی:

fuzzifier, full programmable, low power consumption, current-mode

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/208399>

