

## عنوان مقاله:

Neural Circuit Structure based on Weight Test and Floating Gate performance in Synapse Operation

## محل انتشار:

اولین کنفرانس بین المللی پژوهش ها و دستاوردهای نو در علوم، مهندسی و فناوری های نوین (سال: 1400)

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## خلاصه مقاله:

In this paper, the integrated implementation of analog circuits as soma and as synaptic weighting, which is weight updating and weight maintenance and their potential in playing the role of neurons, has been investigated. The construction of neural networks by passive and active elements is called neuromorphic engineering. In the first stage, the LPF silicon circuit with CMOS technology is examined as soma neural networks and its waveform is considered as a spike for post-synaptic (Synaptic Weighting). Then, using the weight receiver circuit, which in this article acts as a weight update and maintenance, and introducing its features, we achieved the design of an artificial neural circuit network, which is able to implement a neural model. In a circuit designed with new elements, a function close to the .real neuron is created. The design is simulated using HSPICE and Avanwaves software

## کلمات کلیدی:

Neuromorphic, Neuron, Floating Gate, Synapse

## لینک ثابت مقاله در پایگاه سیویلیکا:

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