

عنوان مقاله:

اندازه گیری رابطه آستانه تحریک و فاصله در تحریک الکتریکی سلول های عصبی با استفاده از تکنیک تعامل در پرپود بازگشت

محل انتشار:

چهاردهمین کنفرانس مهندسی پزشکی ایران (سال: 1386)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

For more than a century, electrical stimulation of neural tissue has been in use experimentally and clinically for a wide range of purposes. In many applications of electrical stimulation, it is important to know the spatial extent of neural activation in response to the stimulation. The refractory interaction technique is a method that exploits the interaction between the regions of activation produced by two electrodes when the second stimulus is delivered while neurons in the region activated by the first electrode are in their refractory phase. We proposed a new method to estimate the current-distance relationship based on the refractory interaction technique. We evaluated this method using computerbased simulations of electrical stimulation and demonstrated the applicability and accuracy of the method for .measuring the spatial extent of activation

كلمات كليدي:

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