Nanomaterial-Assisted Acoustic Neural Stimulation

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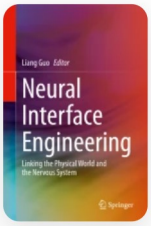

Neural Interface Engineering

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Abstract

Wireless and non-invasive stimulation of neural system, especially at the central level, is considered a critical issue not only for the treatment of a variety of pathological conditions, such as epilepsy, chronic pain, and obsessive-compulsive disorders, but also for reducing the debilitating motor symptoms of movement disorders such as Parkinson's disease, dystonia, and essential tremor. In this chapter, the potential of piezoelectric nanostructured materials for remote non-invasive neural stimulation is presented.

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