

NUMERICAL SIMULATION, OPTIMIZATION AND ARTIFICIAL INTELLIGENCE FOR COMPUTATIONAL ENGINEERING IN NEUROSTIMULATION IMPLANTS

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ABSTRACT

Recent advances have been made in numerical simulation [1] and optimisation [2] of neurostimulation implants. In particular, the advent of artificial intelligence methods has also enabled improvements and new useful approaches in this field [3].

This mini-symposium is aimed at presenting the latest research results in numerical simulation methods (finite elements, etc.) as well as artificial intelligence techniques (neural networks, global stochastic optimisation methods, etc.), for neurostimulation implants (cochlear implants, vestibular implants).

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