

Special Issue

Effect of Electric Field on Stem Cells, Bone/Cartilage Cells, Neurons for Tissue Engineering and Regenerative Medicine

Message from the Guest Editors

This Special Issue aims to consolidate current research to develop a comprehensive understanding of the influence of electric fields on stem cells and bone cells. The scope of this Special Issue ranges from experimental techniques for mathematical modeling to engineering methods for studying tissue regeneration. Therefore, contributions are invited in the form of research articles, reports, and reviews from all science and engineering disciplines focused on the effect of electric fields on cell differentiation, proliferation, and migration. The influence of electric fields on different cellular processes has been the central aspect of cutting-edge research in biological, chemical, physical, and engineering sciences. We are interested in in vitro studies investigating the processes of bone remodeling in the presence of electric fields, as well as in silico models studying the molecular and cellular mechanisms that regulate cell response to applied electric fields. Additionally, articles on the synergy of in vitro and in silico studies for unraveling the mechanisms of cellular processes are also of interest.

Guest Editors

Prof. Dr. Ursula van Rienen

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Dr. Poh Soo Lee

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Deadline for manuscript submissions

closed (20 April 2023)



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About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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