

Special Issue

Application of Artificial Neural Networks for Seismic Design and Assessment

Message from the Guest Editors

The design of new structures with high safety against strong seismic events, as well as the seismic assessment and rehabilitation of existing ones, is one of the most significant research issues in the field of civil engineering. Recently, the effectiveness of research in earthquake engineering has risen with the aid of the increasingly developed abilities of the available computer software and hardware. Thus, all the developed methods that are used for the effective seismic design of new or existing structures are nowadays more applicable. In this framework, the research interest of earthquake engineering has also turned to methods that are classified in the scientific field of machine learning. One of the most used methods is based on the Artificial Neural Networks (ANNs). The ability of ANNs to efficiently perform multiparametric tasks has led to the idea of the use of them as computational tools in earthquake engineering.

The scope of this Special Issue is to attract research works dedicated to the application of ANNs for the improvement of the effectiveness of the seismic design of new structures or the seismic assessment and rehabilitation of existing ones.

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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.

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