Biomedical Engineering Applications in Vision Science

Guest Editor:

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Deadline for manuscript submissions:
closed (20 August 2021)

Message from the Guest Editor

Dear Colleagues,

The diagnosis and treatment of eye disease is now inseparable from biomedical engineering in all its applications. The focus of this Special Issue of *Applied Sciences* is to highlight a wide range of such applications in vision science, as they are poised to transform the field. We invite you to submit your research in the form of an original research paper, a mini-review, or a perspective article.

An explosion of new imaging devices and image analysis techniques are leading the way in non-invasive research and diagnosis.

Eye surgery itself is intensely demanding in precision and intolerant of error. Robotic solutions for remote surgery or performance of spatially precise tasks are transforming this domain.

Tissue engineering for tissue replacement or to enable transplantation is showing great promise, as are nanoparticles for drug and gene delivery. Telemedicine, with remote retinal imaging for DR, AMD, and glaucoma, coupled with deep learning artificial intelligence will transform the very fabric of future medical care.

The field is wide open as never before.

Professor R. Theodore Smith
Guest Editor

Special Issue

Editor-in-Chief

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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.

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