



## Adaptive Optical and Computational Imaging towards Biomedical Application

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Deadline for manuscript  
submissions:

**closed (10 November 2021)**

### Message from the Guest Editors

We jointly invite you to submit a paper to this Special Issue dedicated to adaptive optical and computational imaging toward biomedical applications. The main core of this call relates to techniques employing adaptive optical devices, such as adaptive lenses, digital micromirror devices or spatial light modulators to enable tailored illumination, aberration correction, wavefront shaping or fast flexible scanning and PSF engineering. The scope of this issue further aims at microendoscopic techniques that are based on fibers that are flexibly controlled by SLMs. Further, computational imaging techniques, such as digital holography, phase retrieval, deconvolution, ptychography, and deep-learning-based approaches are (among others) addressed. Applications can range from excitation in one, two and multiphoton microscopy and optogenetics, to super-resolution techniques, dynamic imaging, cell manipulation, and deep tissue applications. Novel approaches and numerical tools to recover or process image information will form a further part of this issue. We hope you find the content of this call relevant to your research and will consider publication of your work within this Special Issue.





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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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