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Advances and Application of Imaging on Digital Holography

Guest Editors:

Prof. Dr. Mingguang Shan

Prof. Dr. Dong Liu

Dr. Zehao He

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Message from the Guest Editors

There has been increasingly intense scientific interest in digital holography as a new modality for general imaging applications. As a result, digital holography can acquire holograms rapidly, obtain complete amplitude and phase information, and provide versatility of the interferometric and image processing techniques. All these advantages make digital holography a very powerful modality for imaging applications, from morphology measurement to emerging fields, such as biomedical imaging, micro-nano industrial detection, and precision instrument detection.

This Special Issue includes, but is not limited to:

- Digital holographic microscopy, reconstruction, tomography, biomedical applications, material applications, polarization imaging
- Digital holographic imaging through scattering media; image encryption; sound field imaging;
- Deep learning for digital holography, and Emerging applications;
- Measurement and industrial detection applications;
- Multimodal imaging based on digital holography;
- Incoherent digital and Compressive holography;
- Digital holography-based near/far field imaging;
- Digital holography in LIDAR;
- Quantitative phase imaging;