

Special Issue

Optical Design in Night Vision Imaging

Message from the Guest Editors

Night vision imaging technology plays a crucial role in various modern optics-related applications, such as night surveillance, assisted driving, and underwater detection. To capture high-quality images in low-light-level conditions, the refined optical design of low-illumination imaging is particularly important, including both vacuum device-based imaging (e.g., image intensifier) and solid state device-based imaging (e.g., EMCCD, IC MOS, qCOMS). Optical designs for other types of significant night vision imaging, such as infrared imaging and spectral imaging, are also encouraged. Of course, the design of new optical modules for night vision imaging is also welcome. In addition, optical signal and image processing technologies, which are closely related to night vision imaging, are included in the scope. This Special Issue (SI) is devoted to the above issues, and its relevant topics thus include (but are not limited to):

- optical design;
- illumination design;
- optical path design;
- imaging system optimization;
- optical material;
- optical coating;
- diffraction grating;
- freeform optics;
- night vision image processing and display.

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