What about multimode fiber imaging

A multimode fiber stands out as a desirable platform for imaging. Here, we propose and experimentally demonstrate a non-interferometric non-iterative approach for high-speed high ...

In this paper, we propose a real-time imaging system using flexible MMFs, but which is robust to bending. Our approach does not require access or feedback signal from the distal end of the...

Here, we propose a new, to the best of our knowledge, method to increase the contrast-to-noise ratio (CNR) of MMF imaging without increasing the number of ...

Multimode optical fiber (MMF) imaging is an emerging fiber imaging technology that has been developed during the last decade. In this work, we demonstrate deep-learning-based MMF ...

Here, we propose a new, to the best of our knowledge, method to increase the contrast-to-noise ratio (CNR) of MMF imaging without increasing the number of controllable modes. Wavelength modulation ...

Here we demonstrate imaging through a single thin MMF for in vivo light-field encoded imaging with subcellular resolution.

The MMF imaging system employed in this study utilizes a single multimode fiber to achieve both illumination and transmission of complex images, thereby significantly enhancing the ...

Methods of imaging in scattering media and particularly MMFs involves measuring the phase and amplitude of the electromagnetic wave, coming out of the MMF and using these measurements to ...

In this Presentation, we will report the exploration of the hydrogel-based MMF imaging technology. The non-toxic and biocompatible hydrogel fiber we made is used as the imaging-transmission medium.

Multimode fiber (MMF) imaging is a powerful technique for minimally invasive endoscopy. However, the absence of high-speed spatial light modulators ...

High spatial resolution typically requires a large number of phase channels. In this paper, we propose and demonstrate a high-resolution wavelength-scanning multimode fiber imaging system, enabled by ...

Multimode fiber (MMF) imaging is a powerful technique for minimally invasive endoscopy. However, the absence of high-speed spatial light modulators (SLMs) poses a challenge in the pursuit ...

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