Gaussian beam injection into multimode fiber

We investigate the input and propagation characteristics and geometric parametric instability of the partial Gaussian beam limited by the fiber face area in a graded-index multimode fiber.

We report our observation of a direct transformation of a Gaussian-like laser beam, initially injected into the cladding of a graded-index multimode ...

We demonstrate that appropriate structuration of the input beam wavefront can shape the light amplified by a rare-earth-doped multimode fiber.

We report our observation of a direct transformation of a Gaussian-like laser beam, initially injected into the cladding of a graded-index multimode fiber (MMF), into a high-order...

Calculation of the coupling ratio of a gaussian beam directly injected into a multimode fiber optic.

The power coupling efficiency of an elliptical-spot-size Gaussian beam into a multimode step-index fiber is derived using a full-wave analysis.

Such a beam may arise, for example, by launching light from a single-frequency laser into a multimode fiber, where the input beam profile is not matched to one particular fiber mode.

The coupling of Laguerre-Gaussian (LG) vortex modes into the Bessel vortex modes in a multimode fiber was analyzed using the vector form of LG beams. A formula for estimating the ...

We propose three novel simulation schemes for excitation of the Linearly-Polarized (L P) modes. In first scheme, when the Laguerre-Gaussian (L G) beam with definite waist is entered into ...

In some applications, an alternative beam distribution such as a top hat or donut is desired instead of the inherent Gaussian distribution provided by typical optics. Here we investigated the effect of changing ...

Such a beam may arise, for example, by launching light from a single-frequency laser into a multimode fiber, where the input beam profile is not matched to one ...

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