Ultrashort pulse laser and amplifier systems based on Yb-doped holey fiber

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Combining an active Ytterbium doped core with the unusual nonlinear and dispersion properties of holey fiber provides opportunities for rapid development of a wide range of diode-pumped ultrashort pulse lasers and amplifiers. Moreover, using the holey structure to guide pump light creates a highly efficient cladding pumped fiber. We describe a number of ultrashort pulse applications based on this rapidly developing technology.

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