

Self-phase modulation in periodically-poled thin-film lithium niobate waveguides

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We study spectral broadening of sub-picosecond telecom wavelength pulses in periodically-poled thin-film lithium niobate waveguides that results from cascaded nonlinear interaction. We experimentally investigate the effect of phase mismatching on spectral broadening and compare the results with simulations based on a split-step Fourier method.

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