

Selected Abstracts from Other Physical Review Journals

Abstracts of papers that are published in other Physical Review journals and may be of interest to Physical Review E readers are printed below.

Strong parametric amplification by spatial soliton-induced cloning of transverse beam profiles in an all-optical antiwaveguide

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Spatial soliton-induced cloning, which achieves and maintains perfect spatial overlap of interacting beams, is proposed as a tool for amplification of nonlinear optical effects on propagation. This is

illustrated by the enhancement of the parametric amplification, obtained through pump-induced cloning of the transverse profiles of the copropagating probe and generated four-wave mixing beams, in an all-optical antiwaveguiding configuration. [Phys. Rev. A **63**, 031801 (2001)]