Abstract

We have explored the possibility of generation and propagation of ultraslow bright optical temporal solitons in asymmetric three-coupled quantum well systems. These bright solitons owe their existence to Kerr and quintic nonlinearities which arise due to a probe pulse and two controlling laser beams. We also find numerically that these solitons are stable against weak perturbation.
Subluminal Optical Temporal Solitons in Asymmetric Three Coupled Quantum Wells


Index Terms

Computer Science

Communication

Keywords

Nonlinear Optics cubic Quintic Nonlinearity Optical Solitons