

Stimulated photon echo with temporal data coding in the Hopfield-Little regime

Vorobieva V., Kalachev A., Samartsev V.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

A model of an optical neural network with associative memory using stimulated photon echo (SPE) with temporal data coding is presented. The electrical field's calculation of the SPE signals is carried out for case of multiple influences on the resonant medium by optical pulses. A computer model of an optical echo processor with associative retrieval of information is elaborated. © 2009 Allerton Press, Inc.

<http://dx.doi.org/10.3103/S1062873809120247>
