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Storage-recovery phenomenon in magnonic crystal

A. V. Chumak, V. I. Vasyuchka, A. A. Serga, M. P. Kostylev, B. Hillebrands

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The phenomenon of wave trapping in an artificial crystal with limited number of periods is demonstrated experimentally using spin waves in a magnonic crystal. The information stored in the crystal is recovered afterwards by parametric amplification of the trapped wave. The storage process is based on the excitation of standing internal crystal modes and differs principally from the well-known phenomenon of deceleration of light in photonic crystals.

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