

CuMnAs is an antiferromagnet in which the possibility of writing and reading information using short electrical or optical pulses has already been demonstrated. This recording represents a switching between different resistive states of the material. In this work, the issues of optical writing and contactless readout using THz pulses at higher than room sample temperatures were investigated. Using detailed optimization of the heater controller for individual sample temperatures, the temperature dependences of the switched resistance of CuMnAs were measured. Relaxation times, threshold fluences, and switching window sizes were extracted from these dependences as a function of temperature. A suitable temperature and suitable conditions for a future pump-probe experiment were extrapolated from the dependence of relaxation times.