Increased information storage capacity in phase-change memory materials using chiral illumination

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We demonstrate that a large circular dichroism (CD) signal can be rapidly induced in specially doped amorphous and originally achiral Ge2Sb2Te5 thin film materials by illumination by chiral laser light. This observation opens a way to increase information storage capacity in optical storage media, where the light's chirality can be recorded and used as an additional information storage parameter.