

A method of forming a magnetic material on the basis of FePt grains oriented structure L1₀ (FePt) phase for longitudinal or perpendicular magnetic recording and storing information comprising forming a matrix, which is a nano-sized alloy film Fe₅₀Pt₅₀ (30 nm). Layer layers deposited by magnetron alloy Fe (15nm) and Pt (15nm) on the substrate monocrystalline aluminum oxide Al₂O₃ (0001) at room temperature.