Optical characterization of FeCo nanostructured

A. Younes, A.BOUAMER, M. Zergoug

Abstract : Fe-Co alloys are important optical and magnetic materials that have been widely used in industry. The material nanostructured has showed a superior magnetic and optic properties Compared to polycrystalline materials. However, optical and magnetic properties of materials nanostructured are affected by their microstructure such as grain size, internal strain and crystal structure. This, studies on synthesis of materials nanostructured with controlled microstructure are obligatory for a significant improvement. MA is a method with a lot of advantage that it can be simply and fabricate large amounts of nanostructured powders in small time. In the present work, starting with two powder mixtures of Fe and Co produced by Mechanical alloying.

Keywords: optical and magnetic properties, Fe-Co alloys nanostructured