Structural and strains analyses of FeCo/A2o3 elaborated by mechanical milling

A.Younes, M.Zergoug, N-E.Bacha, N.Dilmi, M.Khorchef, M.amir

Abstract : The effect of milling time of Fe matrix strengthened with 40% wt % Al2o3 during mechanical alloying was examined for nanocomposite alloy at different milling times (5, 15, 20, 30 h), during milling the lattice strain increased from 0.34 to 0.64%, and residual stress increased from 93.024 to 175.104 Gpa, it is due to sever deformation plastic.

Keywords : Fe/40Al2o3 nonocomposite, MEB, DRX, EDX