

Mechanical alloy property with different physical property of raw material for Cu/CNTs nano composites fabrication by planetary ball mill

_____가, *, _____, Jonghak HA,

(hkchoi99@changwon.ac.kr*)

Recently, many researchers have studied copper nanocomposites, because copper has the very high chemical, physical and mechanical properties. This study was investigated mechanical alloy property with different physical property of raw material for Cu/CNTs nano composites fabrication by planetary ball mill. The comparison with different physical property of raw material as milled and un-milled copper for Cu/CNTs nano composites was studied. In experimental conditions were changed revolution speed, ball diameter and grinding time. The results have been analyzed by powder morphology by SEM photography, surface property by FESEM and crystal structure from XRD on a milled and un-milled copper. We found that the morphology of copper powder was changed from plate type to spherical type for optimum experimental conditions as 1mm ball, 500~ 700 rpm of revolution speed with increase of grinding time for only copper powder. The changed copper powder using for milled Cu/CNTs nanocomposite.