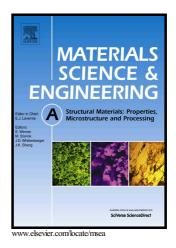
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## Novel synthesizing and characterization of copper matrix composites reinforced with carbon nanotubes

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## Abstract

In this study, we synthesized a novel copper matrix composites reinforced with carbon nanotubes (CNTs/Cu) by combination use of the electroless deposition (ED) and spark plasma sintering (SPS) methods. Firstly, a uniform copper layer was coated on the surface of carbon nanotubes (CNTs), then the CNTs/Cu composite powders containing different volume fractions of CNTs were obtained by mixing copper powder and copper coated CNTs. Finally, the CNTs/Cu composites were rapidly consolidated via SPS process. The powders and sintered composites were characterized using X-Ray diffraction (XRD), Raman spectroscopy, scanning electron microscopy Download English Version:

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