

EFFECTS OF TiC CONTENTS ON MECHANICAL PROPERTIES OF TiC REINFORCED COPPER COMPOSITE

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TÓM TẮT:

In this work, titanium carbide (TiC) reinforced copper (Cu) composite was synthesized via powder metallurgy and cold extrusion technique. The TiC contents were varied from 1 to 5wt% and different sintering temperature were used to study these effects on porosity, compress strength and electrical resistivity of Cu-TiC composite. Results obtained show that porosity and electrical resistivity of the composite increased when increases TiC content and also when increases sintering temperature. Meanwhile, compress strength of the composite peaked at 4wt% TiC and then reduced at higher dose.