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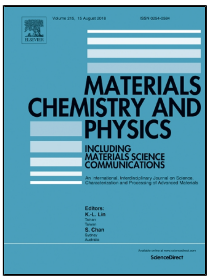

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Abstract: Cu-based bearing shell containing Ni layer was prepared by centrifugal casting. The effect of Ni layer on the microstructure evolution and mechanical property of Cu-based bearing shell with aging treatment was studied. The microstructure of the Sn-Sb-Cu alloy (ZChSnSbCu8-4) without aging is consisted of Sn-based solid solution and Cu_6Sn_5 phases which distributed uniformly in the matrix. After aging treatment, the grain boundary segregation is slowly disappeared, and the matrix transforms into a