

عنوان مقاله:

Fabrication and tribological behavior of electroless Ni-P-CNT composite coating

محل انتشار:

دومین کنفرانس بین المللی کامپوزیت (سال: 1389)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

Ni-P-carbon nanotube (CNT) composite coating was fabricated successfully from a suspension of CNT in an electroless bath. Microhardness of composite coating was compared with Ni-P coating, before and after heat treatment. Wear behavior of coatings were investigated using a pin-on-disk test rig and friction coefficient were reported. The x-ray diffraction (XRD) analysis and the scanning electron microscopy (SEM) were used to characterize coatings. The results indicated that incorporation of CNT in coating not only increased wear resistance but also dramatically decreased friction coefficient. Improving of tribological behavior of Ni-P-CNT composite coating may be attributed to strong mechanical characteristics and unique topological structure of nanotubes

کلمات کلیدی:

CNT, Electroless plating, Composite coating, Wear, Friction

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