

عنوان مقاله:

Production and characterization of coating of Au/Co/diamond nanocomposite by using of electroplating method

محل انتشار:

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خلاصه مقاله:

The aim of this paper is the attainment to a composite coating with characterization such as high abrasive resistance and hardness through concurrent deposition under layer of Copper by using of acid bath of gold 5 nm diamond particles along with Gold and Cobalt. With regard to results of performed experiments, we can say that it will increase abrasive resistance and hardness considerably by adding of Diamond Nanoparticles in Gold/Cobalt bath. As a result, the existence of 12 gr/lit Diamond Nano particles in bath leading to increasing of 25% microhardness in comparison to alloy coating of Gold/Cobalt. In addition to, abrasive resistance of obtained coating is four times more than Gold/Cobalt alloy coating. Foregoing composite is used for coating of parts related to electronics, aerospace, automotive industries and stonecutting segments

كلمات كليدى:

electroplating, coating, nanocomposite, diamond nanoparticle

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