

Electrochemical Measurements of Ultrathin Diamond like Carbon

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Ultrathin (< 5 nm) DLC films with varying stoichiometry and deposition methods were deposited onto NiFe substrate. Series of potentiodynamic polarization and electrochemical impedance spectroscopy were collected. Analysis were then made to correlate electrochemistry at DLC film surface with corrosion behavior of underlying metal that the film is protecting. Learning made serves in designing and optimizing DLC film corrosion protection performance.