Special Issue

Plasma Nitriding of Steels, Titanium and Aluminum Alloys for Manufacturing

Message from the Guest Editor

Plasma nitriding has been widely utilized to harden dies and molds, as well as mechanical and structural parts, instead of using case hardening and gas-/liquid-phase nitriding processes. Various nitriding systems have been developed in recent years, e.g., DC-plasma, DC-pulsed plasma, RF-plasma, beam-assisted plasma, RF/DC plasmas and plasma-enhanced CVD (Chemical Vapor Deposition) systems. In parallel with these instrumental developments, plasma chemistry related to plasma nitriding was also investigated via plasma diagnosis. Various methods and devices have been proposed to improve nitrogen ion and electron density.

Guest Editor

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Message from the Editor-in-Chief

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