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Synthesis and characterization of sputter deposited TiN thin films

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Abstract content
 (Max 300 words)

TiN thin films were deposited on Si<100> substrates and on Cu covered Si substrates by DC magnetron sputtering under varying conditions of power, pressure, argon and nitrogen gas flow rates as well as temperature and characterized by SEM, AFM, RBS, resonant RBS, and XRD. The films were found to adhere well to the substrates. Voltage biasing the films also changes the characteristics of the films. The colour of the films varied depending on deposition conditions and have been expressed in the Lab* colour system. Potential uses of such films are as protective hard coatings as buffer layers to reduce corrosion.

Apply to be
 consider for a student
 award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
 PhD)?

Hons

Main supervisor (name and email)
and his / her institution

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Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

Yes

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