

19) Journal of Physics: Conference Series

Volume 1281, Issue 1, 12 August 2019, Номер статьи 012062

14th International Conference on Films and Coatings, ICFC 2019; Saint Petersburg; Russian Federation; 14 May 2019 до 16 May 2019; Код 151162

Structural features and nitrogen positions in titanium oxynitride films grown in plasma of magnetron discharge(Conference Paper)(Открытый доступ)

Pichugin, V.F.a, Pustovalova, A.A.b, Evdokimov, K.E.a, Konishchev, M.E.a, Kuzmin, O.S.c,d, Boytsova, E.L.a, Beshchasna, N.e, Fikai, A.f, Aubakirova, D.M.g, Sun, Z.a

aTomsk Polytechnic University, Lenin Avenue 30, Tomsk, 634050, Russian Federation

bENV (Zhejiang) New Energy Science and Technology Co. Ltd., Zhejiang, China

cVIP Technologies, Tomsk, 634055, Russian Federation

Просмотр дополнительных организаций

Краткое описание Просмотр приставочных ссылок (15)

The paper addresses the results of the analysis of the structural features of nitrogen-containing titanium oxides films, deposited by reactive magnetron sputtering. The films have a nanocrystalline two-phase structure and consist of anatase and rutile crystallites, regardless of the coating deposition regimes. No traces of titanium nitride phase are found in the film and nitrogen atoms in oxide form are localized at the grain boundaries of the deposited film. © Published under licence by IOP Publishing Ltd.