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Y. Pinot, M.-H. Tuilier, M.-J. Pac, C. Rousselot, D. Thiaudière, C. Ulhaq-Bouillet

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Influence of film thickness on the structural transition cubic/hexagonal within $Ti_{0.38}Al_{0.62}N$ films

Y. Pinot[1], M.-H. Tuilier[1*], M.-J. Pac[1], C. Rousselot [2], D. Thiaudière[3] and C. Ulhaq-Bouillet[4]

[1] Université de Haute-Alsace, Laboratoire de Physique et Mécanique Textiles (EA 4365), F-68093 Mulhouse, France.

[2] Université Bourgogne Franche-Comté, FEMTO-ST (UMR CNRS 6174), BP 71427, F-25211 Montbéliard, France.

[3] Synchrotron Soleil, Saint Aubin, F-91192 Gif sur Yvette, France.

[4] Université de Strasbourg, Institut de Physique et Chimie des Matériaux de Strasbourg (UMR CNRS 7504), F-67087 Strasbourg, France

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Highlights:

Crystal structure of $Ti_{0,38}Al_{0,62}N$ film is analysed at different growth stages

The early stage of growth is mainly cubic with random crystallite orientation

The growth of wurtzite domains oriented with respect to cubic lattice is highlighted

Such heteroepitaxy induces a distortion of tetrahedral sites in wurtzite domains

* Email of corresponding author: marie-helene.tuilier@uha.fr.