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Features of microstructure of ZrN, Si₃N₄ and ZrN/SiN_x nanoscale films irradiated by

Xe ions

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Abstract

The article reports on the TEM investigations of microstructure features after Xe

irradiation (360 keV and 5·10¹⁶ cm⁻²) of ZrN, Si₃N₄ monolithic films and ZrN/SiN_x

multilayered film deposited by magnetron sputtering. Results of TEM study of ZrN

nanocrystalline film, irradiated by Xe ions, have shown that this film seems to be almost

unaffected by the implantation. Only a small amount of damage is observed. In SiN_x

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