

Porous Alumina Assisted Anodizing of Ti/Nb Layers Sensor

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2024

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Keywords: morphology, surface morphology, valves, silicon, oxidation, mesoporous materials, titanium dioxide

Abstract: The three-layer Al/Ti/Nb system onto Si substrates was magnetron sputter-deposited. The titanium/niobium layers in 0.2 M oxalic, orthophosphoric and tartaric solutions were alumina assisted 100 and 200 V potentiostatically anodized and galvanostatically reanodized in 0.5 M boric solution. Titanium oxide (TiO₂), niobium oxide (Nb₂O₅) and their mixture were obtained. The current-time and voltage-time response, morphology and composition were investigated.

Hoha, A. Porous Alumina Assisted Anodizing of Ti/Nb Layers / A. Hoha, A. Poznyak, A. Pligovka // IEEE International Conference on Nanotechnology (NANO) : 24th International conference, Gijon, Spain, July 8-11, 2024. – USA : IEEE, 2024. – P. 570–573.