

J. Surface Sci. Technol., Vol 21, No. 3-4, pp. 139-147, 2005
© 2005 Indian Society for Surface Science and Technology, India

Preparation of Ni Nanowires in Porous Alumina Templates using Unipolar Pulse Electrodeposition Technique

KIRAN JAIN*¹, RASHMI², K. N. SOOD² and S. T. LAKSHMIKUMAR¹

¹*Electronic Materials Division, ²Material Characterization Division, National Physical Laboratory, Dr.K.S.Krishnan Road, New Delhi-110012, India.*

Abstract — Ordered nano-crystalline nickel array was prepared using unipolar pulse electrodeposition technique in porous alumina template. The structural characteristics of the samples were examined using XRD. The morphology of the samples was investigated by means of SEM. The high peak current density applied through pulse deposition influences the degree of orientation and nanowire diameter.