

Characteristics of nickel oxide prepared by anodizing

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The Ni/NiO structure is used the various field including the semiconductor. And the various method for structure formation have been researched.

Anodizing is the useful method which is able to directly form oxide form in metal surfaces.

Using common natural and sulfuric acid electrolyte is only controlled with Å size.

In this study, Ni is anodized at various voltage(40, 60, 80V) under the ethylene glycol electrolyte which is viscous and then NiO is formed with nm~µm size on Ni surface.

Microsturcture of Ni/NiO structure is analyzed by XRD, SEM, EDS.