# Structural Features of Nanoporous Aluminum Oxide Membranes Using Atomic Force Microscopy

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**Abstract:**

Nanoporous aluminum oxide membranes (NPAOM), obtained by a two-stage anodizing process, was an ideal material for creating nanostructures on its basis with given structural parameters and properties. NPAOM were used to create polymer nanostructures, non-interwoven carbon nanotubes, nanorods and nanowires of various materials, such as metals, oxides, etc. due to the structural features and physicochemical properties of NAOM, such as high chemical resistance, which increases with annealing temperature. Atomic Force Microscopy has been used as an ideal method for studying structural features of aluminum oxide nanoporous membranes as dielectric material with unique properties.

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