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Abstract

A high purity (99.999 %) Al foil was pre-textured by 1 h of anodic oxidation in 0.3 M oxalic acid at 45 V and room temperature, followed by the chemical etching of as formed irregular oxide layer. As prepared samples were used for fabrication of porous anodic aluminum oxide (AAO) layers with modulated pore diameters by a simple anodization carried out at the same anodizing conditions (potential and temperature) but in a sequentially changed electrolyte (0.3 M $H_2C_2O_4$ and 0.3 M H_3PO_4). It was proved that anodization carried out in the oxalic acid result in a