

Electrochemical preparation of metal microstructures on large areas of etched ion track membranes

Dobrev D, Vetter J, Angert N

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A microgalvanic method for metal filling of etched ion tracks in organic foils on large areas is described. The method and the used galvanic cell permit the deposition of stable standing individual metal whiskers with high aspect ratio and a density of $10^5 \pm 10^8$ per cm^2 on an area of 12.5 cm^2 . The method was verified with copper and it is suitable also for various other metals. It can be applied for the replication of etched ion tracks and for the fabrication of microstructures containing large numbers of individual metal whiskers.