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RESEARCH PAPERS

用扫描隧道显微镜研究铜表面苯并三氮唑吸附膜的结构形态

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摘要 It is observed by scanning tunneling microscopy (STM) that the adsorbed Benzotriazole (BTA) on copper is long in shape and has an irregular rectangle. The growth of BTA on copper is in the form of polymeric chain and mainly in one dimension rather than two dimensions. The copper surface covered by BTA becomes flatter,smoother and the roughness was smaller than that of bare copper, so the corrosion is largely decreased. However,many grooves can be seen between BTA polymeric chains in which corrosion may exist to a degree.

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Investigation on the morphology of adsorbed benzotriazole film on copper surface by scanning tunneling microcopy

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Key words benzotriazole; scanning tunneling microcopy; copper; morphology

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