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综述

电沉积防护性硅烷薄膜的研究现状与展望

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摘要： 介绍电沉积硅烷Sol-gel薄膜的原理、方法、用途与研究进展，并着重介绍电沉积硅烷薄膜在金属表面防护处理中的应用。针对防护性的特殊要求，提出电沉积硅烷薄膜研究中的难点与展望。

关键词： 硅烷膜 电沉积 防腐蚀 进展

PROGRESS AND PROSPECTIVE IN ELECTRODEPOSITED ANTI-CORROSIVE SILANE FILMS

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Abstract: The principles, methodologies and implications of electrochemically generated silane film materials are reviewed along with some selected recent trends in the fields of functionalized and anti-corrosive sol-gel silica/organosilica films. As a major concern, the recent trends of the electro-assisted generation of organosilica films for corrosion protection are emphasized. The difficulties and the prospective in the study of electrodeposited anti-corrosive silane films are also discussed.

Keywords: silane film electrodeposition corrosion protection progress

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