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次亚磷酸盐溶液电镀三价铬工艺的电化学^①

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摘要: 研究了次亚磷酸盐溶液电镀三价铬工艺的溶液化学性质, 对镀液中三价铬离子与次亚磷酸根离子的配位化合物进行了探讨。用线性电势扫描法、循环伏安法研究了镀液的电化学特征及镀液中氟离子、次亚磷酸根离子、溶液pH值对阴极析氢反应的影响。讨论了获得最佳电流效率的条件。

关键字: 三价铬电镀 惰性配体 析氢反应

ELECTROCHEMICAL STUDY OF PROCESS FOR TRIVALENT CHROMIUM PLATING CONTAINING HYPOPHOSPHITE BATH

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Abstract: The properties of solution chemistry for the process of trivalent chromium plating containing hypophosphite have been investigated. The coordination compounds between trivalent chromium ions and hypophosphite ions have also been discussed. By means of potentiodynamic scanning and cyclic voltammetry, effects of electrochemical characteristics and hydrogen evolution on bath components have been studied.

Key words: trivalent chromium plating inert ligand hydrogen evolution

