

ROLE OF TUNGSTEN IN CURRENT GENERATION AT CATALYTIC DECOMPOSITION OF WATER

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S u m m a r y

Current generation, which occurs at the catalytic decomposition of water $\text{H}_2\text{O} \rightarrow \text{H}^+ + \text{OH}^-$ on electrodes either fabricated of polycrystalline tungsten (W) or fabricated of n -Si or Cr_3Si and covered with a W-admixture electrolytically deposited on those electrodes from the aqueous solution of a tungsten salt, has been studied. The catalytic activity of tungsten with respect to the water decomposition was found to be a little lower in comparison with the activity of other transition metals; nevertheless, the inhibited rate of W oxidation can be used in aqueous electrochemical elements.