

Hydrogen chemical potentials and phase transitions in palladium black electrodeposits

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Abstract

Results are reported of electrode potential and electrical resistance measurements which provide evidence of subsurface hydride transitions in palladium black electrodeposits at much lower equivalent hydrogen vapour pressures than those corresponding to the main region of the $\alpha \rightarrow \beta$ phase transition in the Pd-H system.

Indexed keywords

Engineering controlled terms: Catalysts--Palladium; Electric Measurements--Resistance; Electroplated Products--Phase Transitions; Hydrogen--Chemical Reactions

Engineering uncontrolled terms: Chemical Potentials; Palladium Black Electrodeposits; Subsurface Hydride Transitions

Engineering main heading: Palladium and Alloys