Record Nr. UNINA9910784599203321 Passivation of metals and semiconductors, and properties of thin oxide **Titolo** layers [[electronic resource]]: a selection of papers from the 9th International Symposium, Paris, France, 27 June-1 July 2005 / / edited by Philippe Marcus, Vincent Maurice Pubbl/distr/stampa Amsterdam;; Oxford,: Elsevier, 2006 **ISBN** 1-280-64189-4 9786610641895 0-08-046152-2 Descrizione fisica 1 online resource (765 p.) Altri autori (Persone) MarcusP <1953-> (Philippe) **MauriceVincent** Disciplina 620.11223 Soggetti Passivity (Chemistry) Electrochemistry Metals Semiconductors Corrosion and anti-corrosives Oxide coating Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Front cover; Title page; Copyright; Front matter; Preface; Table of Nota di contenuto contents; An in situ AFM study of the first steps of localised corrosion on a stressed 304L stainless steel in chloride media; Body; Section A Growth, (Nano)structure and Composition of Passive Films: Electrochemical Properties of Fe-Cr-Mo Alloys and Fe2O3-Cr2O3-MoO2 Artificial Passivation Films in 1 M HCI; Formation and growth processes of electrochemical passive layers (borate medium: pH 9.2) and electron stimulated oxidized films Development and Composition of the High Temperature Oxide Film

> Grown on Fe-15Cr during AnnealingPassivity of Nickel-Containing Stainless Steels in Concentrated Sulphuric Acid; An insight on the role of Nickel in the passive films generated on different stainless steels; Passivity of Nitrogen-Bearing Stainless Steel in Acidic Solution; Passive

behaviour of stainless steels and nickel in LiBr solution at different temperatures; The effect of the Cerium ion implantation in the passive films properties of a duplex stainless steel

Use of Alloy 22 as Long-Term Radioactive Waste Containment MaterialEffect of temperature and melt composition on the passivity of a Ni-10%Cr alloy in a molten electrolyte; Spontaneous Passivation of Amorphous Bulk Ni-Cr-Mo-Ta-Nb-P Alloys in Concentrated HCl; Passivity of Fe90V10 and Fe75Cr15V10 in Alkaline Media A. Drexler and H.-H. Strehblow; Effect of anodic passivation on the corrosion behaviour of Fe-Mn-Al steels in 3.5% NaCl; Surface Characterization of 1018 Carbon Steel in Borate Medium by in-situ Electrochemical Scanning Tunneling Microscopy

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Sommario/riassunto

Passivation of Metals and Semiconductors, and Properties of Thin Oxide Layers contains a selection of papers presented at PASSIVITY-9, the 9th International Symposium on the Passivation of Metals and Semiconductors and the Properties of Thin Oxide Layers, which was held in Paris, 27 June - 1 July, 2005. One hundred and twelve peer-reviewed manuscripts have been included. The book covers all the fundamental and applied aspects of passivity and provides a relevant and updated view of the advances and new trends in the field. It is structured in ten sections: Growth,