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Titolo	Passivation of metals and semiconductors, and properties of thin oxide 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
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Altri autori (Persone)	MarcusP <1953-> (Philippe) MauriceVincent
Disciplina	620.11223
Soggetti	Passivity (Chemistry) Electrochemistry Metals Semiconductors Corrosion and anti-corrosives Oxide coating
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover; Title page; Copyright; Front matter; Preface; Table of 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 Fe <sub>2</sub> O <sub>3</sub> -Cr <sub>2</sub> O <sub>3</sub> -MoO <sub>2</sub> Artificial Passivation Films in 1 M HCl; 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 Annealing Passivity 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 Material  
Effect 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  
Iron passivation studied by in situ Raman spectroscopy on Fe/Au(111) epitaxial films  
Atomic-Structure Characterization of Passive Film of Fe by Grazing Incidence X-ray Scattering at SPring-8; Electrochemical aspects of the behavior of perchlorate ions in the presence of iron group metals; The effect of Al supremum 3+ in the passivity of iron in alkaline media containing chlorides; Nanoscale modifications of a Ni (111) surface during nucleation and growth of the passive film; Simultaneous Anodic Dissolution and Passivation of Nickel in Moderate Acid Medium  
Copper Passivity in Carbonate Base Solutions and its Application in Chemical Mechanical Planarization (CMP)  
Analysis of Cu corrosion product in aqueous lithium bromide concentrated solutions; Passivity of Tin and CuSn Alloys in Alkaline Media studied by X-ray Photoelectron Spectroscopy; Surface Analytical Characterization of Chromium Passivation on Tinplate; To Passivate or not to Passivate, that is the Question: The Case of Barium Tin(II) Chloride Fluorides; A Thin Passivating Tin(IV) Oxide Layer on Tin(II)-Containing Fluoride Particles, or not? The  $M_{1-x}Sn_xF_2$  Solid Solutions  
Electrochemical Data About Disruption of Passivating Films. The Pb/PbSO<sub>4</sub>/H<sub>2</sub>SO<sub>4</sub> System

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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,

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