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Nota di contenuto	Acid-Base Properties of Surface Oxide Films -- Capillarity and Corrosion -- A Recent Model of Passivity for Fe-Cr and Fe-Cr-Ni Alloys -- Uptake of Chloride Ions and the Pitting of Aluminum -- Formation of Water Films on the Iron Oxide Surface -- Corrosion Inhibition by Fluorinated Aliphatic Compounds. <
Sommario/riassunto	This SpringerBrief utilizes a surface chemistry/physical chemistry approach toward the study of aqueous corrosion processes. The book starts with a timely and in-depth review of Acid-Base Properties of Surface Oxide Films. Acid-base properties are significant in various surface phenomena such as general and localized corrosion, corrosion inhibition by organic molecules, and the adhesion of organic polymers to oxide-covered metals. This review also discusses the relationship between the two measures of surface charge, the isoelectric point of the oxide film and the potential of zero charge of the oxide-covered metal. Other topics included are capillarity and corrosion, corrosion

inhibition, passivity of Fe-Cr and Fe-Cr-Ni alloys, the uptake of chloride ions and the pitting of aluminum, and the formation of water films on the iron oxide surface.
