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   Titolo   Corrosion Processes : Sensing, Monitoring, Data Analytics, Prevention/Protection, Diagnosis/Prognosis and Maintenance Strategies / / edited by George Vachtsevanos, K. A. Natarajan, Ravi Rajamani, Peter Sandborn

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   Descrizione fisica   1 online resource (VII, 339 p. 266 illus., 188 illus. in color.)

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   Disciplina   620.11223

   Soggetti   Tribology
                   Corrosion and anti-corrosives
                   Coatings
                   Engineering—Materials
                   Materials science
                   Quality control
                   Reliability
                   Industrial safety
                   Tribology, Corrosion and Coatings
                   Materials Engineering
                   Characterization and Evaluation of Materials
                   Quality Control, Reliability, Safety and Risk

   Lingua di pubblicazione   Inglese

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   Nota di contenuto   Introduction -- Principles of Corrosion Processes -- Corrosion Sensing- Corrosion Prevention -- Corrosion Analytics -- Corrosion Modeling -- Corrosion Diagnosis and Prognosis -- Assessing the Value of Corrosion Mitigation in Electronic Systems Using Cost-Based FMEA – Tin Whisker Mitigation.

   Sommario/riassunto   This book discusses relevant topics in field of corrosion, from sensing strategies to modeling of control processes, corrosion prevention, detection of corrosion initiation, prediction of corrosion growth and

evolution, to maintenance practices and return on investment. Written by leading international experts, it combines mathematical and scientific rigor with multiple case studies, examples, colorful images, case studies and numerous references exploring the essentials of corrosion in depth. It appeals to a wide readership, including corrosion engineers, managers, students and industrial and government staff, and can serve as a reference text for courses in materials, mechanical and aerospace engineering, as well as anyone working on corrosion processes.