

1. Record Nr.	UNINA9910878045003321
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Titolo	Advances in Corrosion Modelling // edited by Reza Javaherdashti
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031603587 9783031603570
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (239 pages)
Collana	Engineering Materials, , 1868-1212
Disciplina	620.16
Soggetti	Metals Corrosion and anti-corrosives Materials science - Data processing Materials Catalysis Force and energy Artificial intelligence Metals and Alloys Corrosion Computational Materials Science Materials for Energy and Catalysis Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1 Introduction -- 2 Basics of corrosion -- 3 Simulation of Cathodic Protection of Buried Steel Pipeline under coating disbondments -- 4 Numerical Modelling of CP Systems for Marine Offshore Structures -- 5 Advances in Use of Internal Corrosion Predictive Modelling on Buried Oil & Gas Pipelines.
Sommario/riassunto	This book is devoted to explaining advanced modelling practices of corrosion management. The eleven expert-authored chapters cover various aspects of corrosion management, from the basics of corrosion and its underlying definitions and concepts to the use of specific methods such as fuzzy logic or TRIZ (Russian: Theory of Inventive Problem Solving) for modeling specific corrosion management practices

or assets like pipelines. It features modeling of various corrosion processes and reactions via numerical analysis, machine learning, fuzzy calculus, and fuzzy logic. Each chapter is written by an expert in the field with significant experience, ensuring that the content is up-to-date and of the highest quality. This book is an essential resource for professionals in the industry who seek to enhance their understanding of corrosion and its management through state-of-the-art modeling methods.

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