1. Record Nr. UNINA9910458251503321 Autore Rajeshwar Krishnan Titolo Environmental electrochemistry [[electronic resource]]: fundamentals and applications in pollution abatement // Krishnan Rajeshwar, Jorge G. Ibanez San Diego, : Academic Press, c1997 Pubbl/distr/stampa **ISBN** 1-281-18665-1 9786611186654 0-08-053109-1 Descrizione fisica 1 online resource (793 p.) Altri autori (Persone) IbanezJorge G Disciplina 628.5 Soggetti Electrochemistry Photoelectricity Pollution Electronic books. 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. Nota di contenuto Front Cover; Environmental Electrochemistry: Fundamentals and Applications in Pollution Abatement; Copyright Page; Table of Contents: Chapter 1: 1.1. Introduction: 1.2. Some Definitions and Classification of Pollutants; 1.3. Environmental Media and Pollutant Transport; 1.4. Environmental Chemistry and Toxicology of Common Pollutants - A Primer; 1.5. Current Methods for Pollutant Analyses; 1.6. Current Methods for Pollutant Treatment; 1.7. Electrochemical Technology and the Environment; 1.8. Summary; References; Supplementary Reading: Chapter 2: 2.1. Introduction 2.2. Current, Charge, and Potential 2.3. Charge and Mass Transport; 2.4. Electrode/Electrolyte Interfaces and Electrochemical Cells; 2.5. Thermodynamics and Kinetics in Electrochemical Systems; 2.6. Electroanalytical Chemistry; 2.7. Electrolysis and Electrodeposition; 2.8. Mass Transport Under Forced Convection in an Electrochemical Cell; 2.9. Electrochemical Reactor Design; 2.10. Electrokinetic Phenomena;

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Sommario/riassunto

The first book of its kind, Environmental Electrochemistry considers the role that electrochemical science and engineering can play in environmental remediation, pollution targeting, and pollutant recycling. Electrochemical-based sensors and abatement technologies for the detection, quantification, and treatment of environmental pollutants are described. Each chapter includes an extensive listing of supplemental readings, with illustrations throughout the book to clarify principles and approaches detailed in the text. Key Features* The first book to review electro- and photoel