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Nota di contenuto	Cover; Erosion of Geomaterials; Title Page; Copryright Page; Table of Contents; Foreword; Introduction; Chapter 1. Introduction to the Process of Internal Erosion in Hydraulic Structures: Embankment Dams and Dikes; 1.1. Introduction; 1.2. The significance of internal erosion for hydraulic structures; 1.2.1. The set of hydraulic structures in France; 1.2.2. The vulnerability of hydraulic structures; 1.2.3. Erosion as a leading cause of failure; 1.2.4. Internal erosion: one failure per year in France; 1.3. The impact of incidents on embankment dams and dikes; 1.3.1. Terminology 1.3.2. Initiation areas1.3.3. The importance of design; 1.3.4. Four mechanisms of erosion, classified according to their boundary conditions; 1.3.5. Triggering mechanisms; 1.4. Main results of erosion trials; 1.4.1. Which law of erosion?; 1.4.2. Concentrated leak erosion; 1.4.3. Backward erosion; 1.4.4. Contact erosion; 1.4.5. Suffusion; 1.5. Remarks on the applicability of erosion trials; 1.5.1. Problem of passing

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3.1. Introduction

Sommario/riassunto

This book aims to deliver significant scientific progress on the problem of the erosion of geomaterials, focusing on the mechanical/physical aspect. The chapters oscillate between a phenomenological outlook that is well grounded in experiments, and an approach that can offer a modeling framework.The basic mechanisms of internal and surface erosion are tackled one-by-one: filtration, suffusion, contact erosion, concentrated leak erosion, sediment and wind transport, bedload transport. These erosion mechanisms comprise both hydraulic structures (dams, dikes) and natural environments (wi