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Autore	Schrefler B. A
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3.4. Case of non-saturated masses; 3.4.1. Problem; 3.4.2. Types of modeling; 3.4.3. Three-phase modeling; 3.4.4. Applications; 3.5. Conclusion and prospects; 3.6. Bibliography; Chapter 4. Instability of Rock Masses; 4.1. Introduction; 4.2. Cliff stability and toppling; 4.2.1. Sliding; 4.2.2. Toppling; 4.3. Contact-impact; 4.3.1. General remarks; 4.3.2. Impact at the surface of the terrain; 4.4. Flight trajectory; 4.5. Sliding and rolling  
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## Sommario/riassunto

This book covers a range of topics that are of increasing importance in engineering practice: natural hazards, pollution, and environmental protection through good practice. The first half of the book deals with natural risk factors, of both natural and human origin, that should be considered: subsidence, accidental infiltration, soil instability, rockslides and mudslides, debris flow, and degradation of buildings and monuments due to pollution and climactic effects, for example. These problems are highlighted and it is shown that a combination of sophisticated numerical techniques and e

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