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| Nota di contenuto | Part I: Slips and Falls -- Chapter 1: Introduction -- Chapter 2: Worldwide Statistics of Slips and Falls -- Chapter 3: Basic Principles of Slip Resistance -- Chapter 4: Impact of Slips in The Realm of Footwear -- Chapter 5: Prevalence of Slips and Falls In Specific Sectors -- Part II: Ergonomics in Footwear.-Chapter 6: Overview of The Footwear Industry -- Chapter 7: Design and Effects of Different Types of Footwear -- Chapter 8: Activity Specific Footwear -- Chapter 9: Biomechanics of different footwear.-Part III: Traction Testing Methodologies of Footwear -- Chapter 10: Traditional Methods of Footwear Traction Testing -- Chapter 11: Recent Methods of Footwear Traction Testing -- Part IV: Effect of Popular Tread Orientations on Slip Performance -- Chapter 12: Horizontal Outsole Tread Orientation.-Chapter 13: Vertical Outsole Tread Orientation -- Chapter 14: Square Outsole Tread Orientation.- |

Chapter 15: Oblique Outsole Tread Orientation -- Part V: Effect of Wearing or footwear traction.-Chapter 16: Background on Footwear Wear -- Chapter 17: Wear Mechanisms -- Chapter 18: Effect of Footwear Wear on the Available Traction -- Part VI: Future Opportunities on footwear traction methodologies -- Chapter 19: Challenges Involved in Slip Testing in Actual Realistic Locations -- Chapter 20: New developments in the Area of Slip Testers. .

Sommario/riassunto

This book discusses the science of footwear traction and its relationship with slips and falls. It presents a detailed introduction to slips and falls and how crucial footwear traction is to avoid such incidents. The book covers ergonomics involved in the development of tread designs and the study of their effect on traction across footwear and systematically modified shoes. It discusses characterization techniques employed in the study of footwear traction across normal gait activities, such as walking and running and in sports, such as sprinting, basketball, and football. The book also covers the role of flooring and slippery contaminants on footwear traction and its generalizability. Additionally, the book also presents how the wear of footwear outsoles may reduce the traction at the shoe-floor and lead to slips and falls. It also discusses the challenges with the existing footwear traction testing methods, and the latest developments in this niche area are highlighted. The book is a valuable reference for researchers and professionals interested in ergonomics, footwear technology, manufacturing engineering, safety engineering, and design engineering and its allied fields. .
