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Altri autori (Persone)	MatthewsGerald
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Nota di contenuto	Cover; Contents; List of Figures; List of Tables; The Editors; The Contributors; Part I Introduction to Operator Fatigue; 1 An Overview of Operator Fatigue; 2 An Historical View of Operator Fatigue; 3 Challenges in Fatigue and Performance Research; Part II The Nature of Fatigue; 4 Conceptualizing and Defining Fatigue; 5 Individual Differences in Stress, Fatigue and Performance; 6 Task Characteristics and Fatigue; 7 Fatigue in Sports Psychology; Part III Assessment of Fatigue; 8 Approaches to the Measurement of Fatigue; 9 Dimensional Models of Fatigue 10 Models of Individual Differences in Fatigue for Performance ResearchPart IV The Neuroscience of Fatigue; 11 Neuroscience of Sleep and Circadian Rhythms; 12 The Influence of Fatigue on Brain Activity;

13 Cerebral Hemodynamic Indices of Operator Fatigue in Vigilance; 14 Biochemical Indices of Fatigue for Anti-fatigue Strategies and Products; Part V Performance Effects of Sleep Loss and Circadian Rhythms; 15 Socio-emotional and Neurocognitive Effects of Sleep Loss; 16 Circadian Rhythms and Mental Performance; 17 Sleep Loss and Performance; Part VI Fatigue and Health
18 Differentiating Fatigue in Chronic Fatigue Syndrome and Psychiatric Disorders
19 Chronic Fatigue Syndrome; 20 Upper Respiratory Tract Illnesses and Fatigue; Part VII Applied Contexts for Operator Fatigue; 21 Long Work Hours, Fatigue, Safety, and Health; 22 Fatigue and Road Safety; 23 Driver Fatigue and Safety: A Transactional Perspective; 24 Understanding and Managing Fatigue in Aviation; 25 Soldier Fatigue and Performance Effectiveness: Yesterday, Today and Tomorrow; Part VIII Operational Countermeasures; 26 Adaptive Automation for Mitigation of Hazardous States of Awareness
27 Countermeasures for Driver Fatigue
28 Work Scheduling; 29 Avoiding the Impact of Fatigue on Human Effectiveness; 30 Model-based Fatigue Risk Management; Index

Sommario/riassunto

"Fatigue is a recognized problem in many facets of the human enterprise. It is not confined to any one area of activity but enters all situations in which humans have to perform for extended intervals of time. Most problematic are the circumstances in which obligatory action is continuous and the results of failure are evidently serious or even catastrophic. Therefore, the modern media especially highlights fatigue-related failures in industries such as transportation, materials processing and healthcare. It can be, and indeed is, no coincidence that most of the spectacular failures in process control that have resulted in the world's largest industrial accidents have occurred in the small hours of the morning when the circadian rhythm is lowest and operator fatigue itself peaks. While there have been legislative efforts made at state, federal and international levels to regulate working hours of employees, the appropriate implementation of such legislation is still a long way off. The Handbook of Operator Fatigue provides a comprehensive account of the subject to serve as the definitive reference work for researchers, students and practitioners alike. The volume features 30 chapters written by experts from around the world to address each important facet of fatigue, including: the scale of the fatigue problem (Section I), the nature of fatigue (Section II), how to assess fatigue (Section III), the impact of fatigue on health (Section IV), fatigue in the workplace (Section V), the neurological basis of fatigue (VI), sleep disorders (VII), and the design of countermeasures to fatigue (VIII)."--Provided by publisher.
