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Titolo	Advances in Physical Ergonomics and Human Factors : Proceedings of the AHFE 2017 International Conference on Physical Ergonomics and Human Factors, July 17-21, 2017, The Westin Bonaventure Hotel, Los Angeles, California, USA // edited by Ravindra S. Goonetilleke, Waldemar Karwowski
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ISBN	3-319-60825-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XIII, 505 p. 186 illus.)
Collana	Advances in Intelligent Systems and Computing, , 2194-5365 ; ; 602
Disciplina	620.82
Soggetti	Occupational health services Security systems Engineering design Computational intelligence User interfaces (Computer systems) Human-computer interaction Occupational Health Security Science and Technology Engineering Design Computational Intelligence User Interfaces and Human Computer Interaction
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Evaluation of two types of reference contraction and the effect of electrode positioning on recordings of extensor carpi radialis muscle activity -- Hand arm vibration, grip strength assessment and the prevalence of health disorders among stone crushing workers -- Understanding shoulder injury -- Firing of a cannon: Biomechanical evaluation of ergonomic hazards -- The effects of an intervention focusing on hip flexion and posterior movement of the pelvis on postural stability, spinal loading and lumbar flexion during reaching

and lifting -- A pilot study of gender difference on anthropometric measurements in Singapore population -- Anthropometric evaluation of the design of the classroom desk for the eighth and ninth grades of Benghazi schools -- The biomechanics and ergonomics of the impact of anti-fatigue mats on decreasing whole body vibration -- Development of an ergonomic evaluation tool for health-promoting physical workplaces -- A study on activation of on-site management in railway enterprise: Focusing on occupation responsible for user's safety -- An interview study on children's spectacle frame fit -- A comparative study of the effects of electrical stimulation and intermittent compressive forces on soft tissue mechanical properties -- Prospective design of seating systems for digitalized working worlds.

Sommario/riassunto

This book reports on the state of the art in physical ergonomics and is concerned with the design of products, process, services, and work systems to assure their productive, safe, and satisfying use by people. With focus on the human body's responses to physical and physiological work demands, repetitive strain injuries from repetition, vibration, force, and posture are the most common types of issues examined, along with their design implications. The book explores a wide range of topics in physical ergonomics, which includes the consequences of repetitive motion, materials handling, workplace safety, and usability in the use of portable devices, design, working postures, and the work environment. Mastering physical ergonomics and safety engineering concepts is fundamental to the creation of products and systems that people are able to use, as well as the avoidance of stresses and minimization of the risk of accidents. Based on the AHFE 2017 Conference on Physical Ergonomics and Human Factors, July 17-21, 2017, in Los Angeles, California, USA, this book provides readers with a comprehensive view of the current challenges in Physical Ergonomics, which are a critical aspect in the design of any human-centered technological system, and factors influencing human performance.
