



Biomechanics of cycling

/

Bini, Rodrigo R.,
editor

Carpes, Felipe P.,
editor

Monografía

Bicycles have been a common device to enhance physical fitness level in gyms and training centers along with solid use in competitive sport. For that reason, biomechanics of cycling has grown as a research field with many publications addressing different perspective of the interaction between the cyclist and his bicycle. The most common end point of research on biomechanics of cycling is optimization of performance and reduction of injury risk. One goal of this book is to meet the growing need for a comprehensive presentation of contemporary knowledge on biomechanics of cycling which will positively influence the activity of cycling in a global fashion. In order to accomplish this purpose, ten chapters are presented with focus on varying methods for biomechanical analysis of cycling motion. The introduction section provides an overview of the main methods for assessment of cycling motion, including motion analysis, pedal force measurements, muscle activation, anthropometry and joint kinetics. These methods are discussed in depth in individual chapters followed by chapters on characteristics of bicycles and potential perspectives to improve their configuration in order to improve performance of cyclists and reduce their overuse injury risk. Moreover, a preliminary method to train technique in cyclists is shown. A final chapter provides authors perspective on the upcoming technology that should be effective in helping training of cyclists

<https://rebiunoda.pro.baratznet.cloud:38443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMzgyNDcyNDY>

Título: Biomechanics of cycling Rodrigo R. Bini, Felipe P. Carpes, editors

Editorial: Cham Springer [2014]

Descripción física: 1 online resource illustrations

Bibliografía: Includes bibliographical references and index

Contenido: Introduction to Biomechanical Analysis for Performance Enhancement and Injury Prevention -- Measuring Pedal Forces -- Muscle Activity -- Joint Kinematics -- Kinetics and Pedaling Technique -- Non-traumatic Injuries in Cycling -- Bicycle Types and Sizes -- Optimizing Bicycle Configuration and Cyclists' Body Position to Prevent Overuse Injury Using Biomechanical Approaches -- Pedaling Technique Changes with Force Feedback Training in Competitive Cyclists: Preliminary Study -- Technology in Cycling

Lengua: English

Copyright/Depósito Legal: 885122272 985046458 1005766804 1048108464 1066470043 1103274677 1110839305 1204020480 1259152905 1340097299

ISBN: 9783319055398 electronic bk.) 3319055399 electronic bk.) 3319055380 print) 9783319055381 print) 9783319350387 print) 3319350382 9783319055404 print) 3319055402 9783319055381

Materia: Cycling- Physiological aspects Biomechanics Bicycling- physiology Biomechanical Phenomena Cyclisme- Aspect physiologique Biomécanique MEDICAL- Physiology. SCIENCE- Life Sciences- Human Anatomy & Physiology. Médecine. Biomechanics. Cycling- Physiological aspects.

Autores: Bini, Rodrigo R., editor Carpes, Felipe P., editor

Enlace a formato físico adicional: Print version 9783319055381

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es