Record Nr. UNISA996218599403316 Biomechanics in sport [[electronic resource]]: performance **Titolo** enhancement and injury prevention / / edited by Vladimir M. Zatsiorsky Pubbl/distr/stampa Oxford: Malden, MA.: Blackwell Science, 2000 **ISBN** 1-281-30976-1 9786611309763 0-470-69379-7 0-470-69304-5 Edizione [1st ed.] Descrizione fisica 1 online resource (682 p.) Collana Volume IX of the Encyclopaedia of sports medicine Altri autori (Persone) ZatsiorskyVladimir M. <1932-> Disciplina 617.1/027 Soggetti Human mechanics Sports injuries Sports - Physiological aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "An IOC Medical Commission publication in collaboration with the International Federation of Sports Medicine." Nota di bibliografia Includes bibliographical references and index. Nota di contenuto BIOMECHANICS IN SPORT: Contents: List of Contributors; Forewords: Preface: Part 1:Muscle Action in Sport and Exercise: 1 Neural Contributions to Changes in Muscle Strength; 2 Mechanical Properties and Performance in Skeletal Muscles; 3 Muscle-Tendon Architecture and Athletic Performance: 4 Eccentric Muscle Action in Sport and Exercise; 5 Stretch -Shortening Cycle of Muscle Function; 6 Biomechanical Foundations of Strength and Power Training; Part 2: Locomotion; 7 Factors Affecting Preferred Rates of Movement in Cyclic Activities; 8 The Dynamics of Running; 9 Resistive Forces in Swimming, 10 Propulsive Forces in Swimming11 Performance-Determining Factors in Speed Skating: 12 Cross-Country Skiing:Technique, Equipment and Environmental Factors Affecting Performance; Part 3: Jumping and Aerial Movement; 13 Aerial Movement; 14 The High Jump; 15 Jumping in Figure Skating; 16 Springboard and Platform Diving; 17 Determinants of Successful Ski-Jumping Performance; Part 4:Throwing and Hitting;

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## Sommario/riassunto

Biomechanics in Sport is a unique reference text prepared by the leading world experts in sport biomechanics. Over thirty chapters cover a broad spectrum of topics, ranging from muscle mechanics to injury prevention, and from aerial movement to wheelchair sport. The biomechanics of sports including running, skating, skiing, swimming, jumping in athletics, figure skating, ski jumping, diving, javelin and hammer throwing, shot putting, and striking movements are all explained.