

1. Record Nr.	UNINA9910299162003321
Autore	Kos Anton
Titolo	Biomechanical Biofeedback Systems and Applications / / by Anton Kos, Anton Umek
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-91349-2
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (192 pages)
Collana	Human-Computer Interaction Series, , 1571-5035
Disciplina	571.7
Soggetti	User interfaces (Computer systems) Electrical engineering Sports sciences Signal processing Image processing Speech processing systems User Interfaces and Human Computer Interaction Communications Engineering, Networks Sport Science Signal, Image and Speech Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Biomechanical Biofeedback -- Biofeedback System -- Biofeedback System Architectures -- Biofeedback Systems in Sport -- Technologies for Biofeedback Systems in Sport -- Applications -- Conclusion, Trends, Outlooks, Future Work. .
Sommario/riassunto	This book deals with the topic of biomechanical biofeedback systems and applications that are primarily aimed at motor learning in sports and rehabilitation. It gives a comprehensive tutorial of the concepts, architectures, operation, and exemplary applications of biomechanical biofeedback systems. A special section is dedicated to various constraints in designing biomechanical biofeedback systems. The book also describes the technologies needed for the adequate operation of biofeedback systems, such as motion tracking, communication,

processing, and sensor technologies. In regard to technologies, the emphasis is on the assurance of the requirements of the real-time system operation. The application focus is on the usage in sport and rehabilitation, particularly in the field of accelerated motor learning and injury prevention. We include several examples of operational (real-time) biofeedback applications in golf, skiing, and swimming. The book is in the first place intended for the professional audience, researchers, and scientists in the fields connected to the topics of this book.

---