1.	Record Nr. Autore Titolo Pubbl/distr/stampa	UNINA9910576872303321 Capodaglio Paolo Wearables for Movement Analysis in Healthcare Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
	Descrizione fisica	1 electronic resource (252 p.)
	Soggetti	Research & information: general Biology, life sciences Biochemistry
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Sommario/riassunto	Quantitative movement analysis is widely used in clinical practice and research to investigate movement disorders objectively and in a complete way. Conventionally, body segment kinematic and kinetic parameters are measured in gait laboratories using marker-based optoelectronic systems, force plates, and electromyographic systems. Although movement analyses are considered accurate, the availability of specific laboratories, high costs, and dependency on trained users sometimes limit its use in clinical practice. A variety of compact wearable sensors are available today and have allowed researchers and clinicians to pursue applications in which individuals are monitored in their homes and in community settings within different fields of study, such movement analysis. Wearable sensors may thus contribute to the implementation of quantitative movement analyses even during outpatient use to reduce evaluation times and to provide objective, quantifiable data on the patients' capabilities, unobtrusively and continuously, for clinical purposes.