Record Nr. UNISALENTO991001691739707536 Autore Koeppen, Wolfgang Titolo Es war einmal in Masuren / Wolfgang Koeppen Pubbl/distr/stampa Frankfurt am Main: Suhrkamp, 1991 **ISBN** 3518404180 Descrizione fisica 59 p.; 22 cm. Lingua di pubblicazione Tedesco **Formato** Materiale a stampa Livello bibliografico Monografia Record Nr. UNINA9910136807903321 Autore Jose L. Pons **Titolo** Biosignal processing and computational methods to enhance sensory motor neuroprosthetics Pubbl/distr/stampa Frontiers Media SA, 2016 Lausanne, Switzerland:,: Frontiers Media SA,, 2016 ©2016 Descrizione fisica 1 online resource (228 p.) Frontiers Research Topics Collana Soggetti Neurosciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Though there have been many developments in sensory/motor Sommario/riassunto prosthetics, they have not yet reached the level of standard and

worldwide use like pacemakers and cochlear implants. One challenging issue in motor prosthetics is the large variety of patient situations, which depending on the type of neurological disorder. To improve

neuroprosthetic performance beyond the current limited use of such systems, robust bio-signal processing and model-based control involving actual sensory motor state (with biosignal feedback) would bring about new modalities and applications, and could be a breakthrough toward adaptive neuroprosthetics. Recent advances of Brain Computer Interfaces (BCI) now enable patients to transmit their intention of movement. However, the functionality and controllability of motor prosthetics itself can be further improved to take advantage of BCI interfaces. In this Research Topic we welcome contribution of original research articles, computational and experimental studies, review articles, and methodological advances related to biosignal processing that may enhance the functionality of sensory motor neuroprosthetics. The scope of this topic includes, but is not limited to, studies aimed at enhancing: 1) computational biosignal processing in EMG (Electromyography), EEG (Electroencephalography), and other modalities of biofeedback information; 2) the computational method in modeling and control of sensory motor neuroprosthetics; 3) the systematic functionality aiming to provide solutions for specific pathological movement disorders; 4) human interfaces such as BCI but in the case of BCI study, manuscripts should be experimental studies which are applied to sensory/motor neuroprosthetics in patients with motor disabilities.