1. Record Nr. UNINA9910346743003321 Autore Poramate Manoonpong Titolo Neural Computation in Embodied Closed-Loop Systems for the Generation of Complex Behavior: From Biology to Technology Pubbl/distr/stampa Frontiers Media SA, 2018 Descrizione fisica 1 online resource (278 p.) Collana Frontiers Research Topics Soggetti Neurosciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto How can neural and morphological computations be effectively combined and realized in embodied closed-loop systems (e.g., robots) such that they can become more like living creatures in their level of performance? Understanding this will lead to new technologies and a variety of applications. To tackle this research question, here, we bring together experts from different fields (including Biology, Computational Neuroscience, Robotics, and Artificial Intelligence) to share their recent findings and ideas and to update our research community. This eBook collects 17 cutting edge research articles, covering neural and morphological computations as well as the transfer of results to real world applications, like prosthesis and orthosis control and

neuromorphic hardware implementation.