1. Record Nr. UNINA9910136286103321 Autore Jochen Musseler Titolo Multisensory integration in action control Pubbl/distr/stampa Frontiers Media SA, 2014 [Place of publication not identified], : Frontiers Media SA, 2014 Descrizione fisica 1 online resource (142 pages) Collana Frontiers Research Topics, , 1664-8714 Disciplina 152.1 Soggetti Psychology Social Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references. Sommario/riassunto The integration of multisensory information is an essential mechanism in perception and in controlling actions. Research in multisensory integration is concerned with how the information from the different sensory modalities, such as the senses of vision, hearing, smell, taste, touch, and proprioception, are integrated to a coherent representation of objects. Multisensory integration is central for action control. For instance, when you grasp for a rubber duck, you can see its size and hear the sound it produces. Moreover, identical physical properties of an object can be provided by different senses. You can both see and feel the size of the rubber duck. Even when you grasp for the rubber duck with a tool (e.g. with tongs), the information from the hand, from the effect points of the tool and from the eyes are integrated in a manner to act successfully. Over the recent decade a surge of interest in multisensory integration and action control has been witnessed,

especially in connection with the idea that multiple sensory sources are integrated in an optimized way. For this perspective to mature, it will be helpful to delve deeper into the information processing mechanisms and their neural correlates, asking about the range and constraints of

this mechanisms, about its localization and involved networks.