

1. Record Nr.	UNINA9910806195403321
Autore	Gu Yong
Titolo	Advances of Multisensory Integration in the Brain [[electronic resource] /] / edited by Yong Gu, Adam Zaidel
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9976-11-1
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (175 pages)
Collana	Advances in Experimental Medicine and Biology, , 2214-8019 ; ; 1437
Altri autori (Persone)	ZaidelAdam
Disciplina	612.8
Soggetti	Neurosciences Cognitive psychology Medicine - Research Biology - Research Neuroscience Cognitive Psychology Biomedical Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Development of multisensory integration in the brain -- Multisensory decision making in the macaque brain -- Multisensory integration and decision making in the rodent brain -- Multisensory causal inference in macaque and human brains -- Cross-modal associations and working memory in the brain -- Spatial reference coding of multisensory signals in the brain -- Psychophysical and neural evidence for cross-modal perceptual grouping and synesthetic correspondence -- Resolving the neural mechanisms of Bayesian Causal Inference across space and time -- Interactions of vestibular, visual and proprioceptive signals for self-motion perception -- Decentralized neural network of multisensory information integration in the brain.
Sommario/riassunto	This book presents the latest research on multisensory brain function. Namely, the mechanisms by which the brain processes and integrates information from multiple sensory modalities. Its contents cover a broad range of topics, including optimal integration, cross-modal interactions, calibration, and causal inference – with an emphasis on

their neuronal underpinnings. By bringing together efforts from different laboratories around the world we aim to collaboratively shed light on these fundamental brain processes, that underlie perception, cognition, and behavior in a complex multisensory world, and to spur innovation of brain-inspired technologies.
