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Titolo	Auditory neuroscience [[electronic resource]] : making sense of sound / / Jan Schnupp, Israel Nelken, and Andrew King
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Altri autori (Persone)	NelkenIsrael <1961-> KingAndrew <1959->
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Why things sound the way they do -- The ear -- Periodicity and pitch perception : physics, psychophysics, and neural mechanisms -- Hearing speech -- Neural basis of sound localization -- Auditory scene analysis -- Development, learning, and plasticity -- Auditory prostheses : from the lab to the clinic and back again.
Sommario/riassunto	An integrated overview of hearing and the interplay of physical, biological, and psychological processes underlying it.Every time we listen--to speech, to music, to footsteps approaching or retreating--our auditory perception is the result of a long chain of diverse and intricate processes that unfold within the source of the sound itself, in the air, in our ears, and, most of all, in our brains. Hearing is an "everyday miracle" that, despite its staggering complexity, seems effortless. This book offers an integrated account of hearing in terms of the neural processes that take place in different parts of the auditory system.Because hearing results from the interplay of so many physical, biological, and psychological processes, the book pulls together the

different aspects of hearing--including acoustics, the mathematics of signal processing, the physiology of the ear and central auditory pathways, psychoacoustics, speech, and music--into a coherent whole.