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| Titolo                  | The human auditory system : fundamental organization and clinical disorders // volume editors, Gastone G. Celesia and Gregory Hickok ; contributors, P. Afra [and forty-seven others]   |
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| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Description based upon print version of record.   |
| Nota di bibliografia    | Includes bibliographical references at the end of each chapters and index.  |
| Nota di contenuto       | Front Cover; The Human Auditory System: Fundamental Organization and Clinical Disorders; Copyright; Handbook of Clinical Neurology 3rd Series; Foreword; Preface; Contributors; Contents; Section 1: Anatomy and Physiology of the Human Auditory System; Chapter 1: Auditory Pathways: Anatomy and Physiology; Introduction and Overview; The Outer and Middle ears; The Absolute Threshold and Relation to outer- and middle-ear Transmission; The Cochlea; Overall Anatomy; Anatomy in Relation to Function; The Output of the Cochlea; The Auditory Central Nervous System: Introduction to Central Processing<br>The Ventral Auditory Stream Of the Brainstem Sound Localization By Comparing Responses At the Two ears; The Anteroventral Cochlear Nucleus; The Medial Superior olive; The Lateral Superior olive; Outputs of the Ventral Auditory Stream of the Brainstem; The Dorsal Auditory |

Stream of the Brainstem: Complex Stimulus Analysis; The Dorsal Cochlear Nucleus; The Posteroventral Cochlear Nucleus; The Ventral Nucleus of the Lateral Lemniscus; The Inferior Colliculus; The Central Nucleus of the Inferior Colliculus; The External Nucleus and Dorsal Cortex of the Inferior Colliculus  
The Medial Geniculate body  
Overall Anatomy and Inputs; The Ventral Nucleus; Anatomy and Frequency Organization; Responses To sound; The Medial and Dorsal Nuclei of the MGB; The Auditory Cortex; Anatomic Introduction to the Auditory Cortex; Tonotopic Organization; Organization Along frequency-band Strips; Responses of Single Neurons: Responses In the core; Responses of Single Neurons: Responses In the belt; Cortical Processing of Sound Location; Cortical Processing in Relation to Stimulus Complexity; The Centrifugal System; References; Chapter 2: Anatomic Organization of the Auditory Cortex  
What is Auditory Cortex? Principles of Auditory Cortical Organization; Principle 1: Auditory Cortex Can Be Divided Into Regions; Principle 2: Regions of Auditory Cortex Are subdivided Into areas; Principle 3: Individual Areas of Auditory Cortex are Tonotopically Organized; Principle 4: Thalamic Inputs to Auditory Cortex Vary By Region And layer; MGv; MGd; MGm; Principle 5: The Connections of Auditory Cortex have Serial and Parallel Features; Serial Connections and Hierarchic Relationships; Core-belt-parabelt axis; Caudal-rostral axis; Parallel Connections  
Principle 6: The auditory-related Connections of Auditory Cortex are Topographically Organized  
Superior Temporal Cortex; Prefrontal and Cingulate Cortex; Posterior Parietal Cortex; Occipital Cortex; Anterior Parietal Cortex; Striatum; Amygdala; Functional Considerations; Correspondence of Human and non-human Primate Auditory Cortex; Where is Auditory Cortex in the Human brain?; Regions And areas; Concluding Remarks; Acknowledgments; References; Chapter 3: Development of the Auditory System; Introduction; Development of The ear; Behavioral Testing and Psychoacoustics  
Coding of Auditory Features

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### Sommario/riassunto

The Human Auditory System: Fundamental Organization and Clinical Disorders provides a comprehensive and focused reference on the neuroscience of hearing and the associated neurological diagnosis and treatment of auditory disorders. This reference looks at this dynamic area of basic research, a multidisciplinary endeavor with contributions from neuroscience, clinical neurology, cognitive neuroscience, cognitive science communications disorders, and psychology, and its dramatic clinical application. A focused reference on the neuroscience of hearing and clinical disorders  
Covers both basic brain s

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