

1. Record Nr.	UNINA9910795633503321
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Titolo	Auditory Brainstem Implants / / Eric P. Wilkinson and Marc S. Schwartz
Pubbl/distr/stampa	New York, NY : , : Thieme, , [2021] ©2021
ISBN	1-63853-538-8 1-68420-268-X 1-62623-827-8
Edizione	[First edition.]
Descrizione fisica	1 online resource (162 pages) : illustrations
Disciplina	617.807547
Soggetti	Neural stimulation Auditory evoked response Implants, Artificial
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
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Sommario/riassunto

"Research on the auditory brainstem implant (ABI) has evolved from a highly specialized, narrow field to one involving a wide spectrum of disciplines. Neurotologists, audiologists, otolaryngologists, and neurosurgeons are on the front lines of treatment, while many other specialists play active roles. Auditory Brainstem Implants by renowned ABI experts Eric P. Wilkinson and Marc S. Schwartz is the first dedicated book on ABIs published to date. The state-of-the-art monograph brings together a rich array of materials and resources from an impressive group of pioneering clinicians and researchers from around the world. The text starts with introductory chapters encompassing the history and development of ABIs; relevant neuroanatomy and physiology; imaging of the cochlea, cochlear nerve, brainstem, and auditory system; and clinical indications for ABIs. Surgical chapters detail translabyrinthine, retrosigmoid, and retrolabyrinthine approaches, pediatric applications, auditory midbrain implants, device-specific engineering, and intraoperative monitoring. Auditory testing, performance variables, and results are also reviewed. The final chapters focus on innovative future directions, such as penetrating multisite microelectrodes and the use of optogenetics"--

2. Record Nr.	UNIORUON00253509
Titolo	2001 nian Zhongguo zuijia duanpian xiaoshuo / [a cura di] Wang Guangdong
Pubbl/distr/stampa	Shenyang, : Chufeng wenyi chubanshe, 2002
ISBN	75-313-2404-0
Descrizione fisica	296 p. ; 21 cm
Classificazione	CIN VI B
Soggetti	LETTERATURA CINESE - SAGGISTICA - SEC. XX Letteratura cinese- Sec. XX
Lingua di pubblicazione	Cinese
Formato	Materiale a stampa
Livello bibliografico	Monografia