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Titolo	The technology of binaural listening / / Jens Blauert, editor
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	3-642-37762-9
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (516 p.)
Collana	Modern Acoustics and Signal Processing
Altri autori (Persone)	BlauertJens
Disciplina	620.2
Soggetti	Hearing aids Signal processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	From the Contents: An Introduction to Binaural Processing -- The Auditory-modeling Toolbox -- Acquisition and Representation of Head-related Transfer Functions -- Binaural Analysis of Complex Listening Environments -- Binaural Scene Analysis with Multi-dimensional Statistical Filters -- Extracting Room and Source-distance Information from Binaural.-Binaural Evaluation of Auditory Scenes Using Head Movements -- Binaural Systems in Robotics -- Binaural Assessment of Multi-channel Reproduction -- Optimization and Assessment of Binaural Algorithms for Hearing.
Sommario/riassunto	This book reports on the application of advanced models of the human binaural hearing system in modern technology, among others, in the following areas: binaural analysis of aural scenes, binaural de-reverberation, binaural quality assessment of audio channels, loudspeakers and performance spaces, binaural perceptual coding, binaural processing in hearing aids and cochlea implants, binaural systems in robots, binaural/tactile human-machine interfaces, speech-intelligibility prediction in rooms and/or multi-speaker scenarios. An introduction to binaural modeling and an outlook to the future are provided. Further, the book features a MATLAB toolbox to enable readers to construct their own dedicated binaural models on demand.