1. Record Nr. UNINA9910688164103321

Titolo	Advances in Fundamental and Applied Research on Spatial Audio / / Brian F. G. Katz, Piotr Majdak, editor
Pubbl/distr/stampa	London : , : IntechOpen, , 2022
Descrizione fisica	1 online resource (232 pages)
Disciplina	784.19028546
Soggetti	Computer sound processing Software synthesizers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Modeling and Testing of Loudspeakers Used in Sound-Field Control -- 2. Perspective Chapter: Modern Acquisition of Personalised Head-Related Transfer Functions -- An Overview -- 3. HRTF Performance Evaluation: Methodology and Metrics for Localisation Accuracy and Learning Assessment -- 4. The Influences of Hearing and Vision on Egocentric Distance and Room Size Perception under Rich-Cue Conditions -- 5. Reverberation and its Binaural Reproduction: The Trade-off between Computational Efficiency and Perceived Quality -- 6. Binaural Reproduction Based on Bilateral Ambisonics -- 7. Spatial Audio Signal Processing for Speech Telecommunication inside Vehicles -- 8. Binaural Headphone Monitoring to Enhance Musicians' Immersion in Performance.
Sommario/riassunto	Spatial audio is a dynamic and rapidly evolving field, as it is closely linked to advances in computer technology and digital signal processing. The democratization of virtual reality hardware available as consumer devices has moved the field further out of traditional laboratory research, and directly into applied research targeting a wide range of consumers. Advances in Fundamental and Applied Research on Spatial Audio presents a collection of eight peer-reviewed chapters on this exciting area of research. The contributions are organized into three sections: "Acoustic Methodology", "Perception", and "Applications", and cover a range of topics, addressing both headphone- and loudspeaker-based reproductions, offering both

methodological overviews and specific case studies.