Publications:

Adaptive and Selective Time Averaging of Auditory Scenes
McWalter, R. I. & McDermott, J. H. 2018 In : Current Biology. 28, 9, p. 1405-1418.e10
Publication: Research - peer-review › Journal article – Annual report year: 2018

Adaptive Processes in Hearing
Publication: Research › Editorial – Annual report year: 2018

Cortical oscillations and entrainment in speech processing during working memory load
Hjortkjær, J., Mærcher-Rørsted, J., Fuglsang, S. A. & Dau, T. 2018 In : European Journal of Neuroscience. p. n/a-n/a
Publication: Research - peer-review › Journal article – Annual report year: 2018

Decoding the auditory brain with canonical component analysis
Publication: Research - peer-review › Journal article – Annual report year: 2018

Effect of harmonic rank on sequential sound segregation
Publication: Research - peer-review › Journal article – Annual report year: 2018

Effects of Expanding Envelope Fluctuations on Consonant Perception in Hearing-Impaired Listeners
Publication: Research - peer-review › Journal article – Annual report year: 2018

Effects of Hearing Loss and Fast-Acting Compression on Amplitude Modulation Perception and Speech Intelligibility
Publication: Research - peer-review › Journal article – Annual report year: 2018

Effects of musical training and hearing loss on pitch discrimination
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Effects of non-stationary noise on consonant identification
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Evaluation of supra-threshold hearing following an event of recreational acoustic exposure
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Frequency modulation excursion and rate discrimination in normal-hearing and hearing-impaired listeners
Schindwolf, I., Vatti, M. & Santurette, S. 2018
Publication: Research › Poster – Annual report year: 2018
Impact of SNR, masker type and noise reduction processing on sentence recognition performance and listening effort as indicated by the pupil dilation response
Publication: Research - peer-review › Journal article – Annual report year: 2018

Periphony-Lattice Mixed-Order Ambisonic Scheme for Spherical Microphone Arrays
Publication: Research - peer-review › Journal article – Annual report year: 2018

Predicting consonant recognition and confusions using a microscopic speech perception model
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2018

Predicting Speech Intelligibility based on Fluctuations in Simulated Auditory Nerve Responses
Zaar, J., Scheidiger, C., Carney, L. H. & Dau, T. 2018
Publication: Research - peer-review › Poster – Annual report year: 2018

Robust speech dereverberation with a neural network-based post-filter that exploits multi-conditional training of binaural cues
Publication: Research - peer-review › Journal article – Annual report year: 2018

Task dialog by native-Danish talkers in Danish and English in both quiet and noise
Sørensen, A. J., Fereczkowski, M. & MacDonald, E. 2018
Publication: Research › Dataset – Annual report year: 2018

Task-Modulated Cortical Representations of Natural Sound Source Categories
Publication: Research - peer-review › Journal article – Annual report year: 2018

Technical evaluation of hearing-aid fitting parameters for different auditory profiles
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

The benefit of combining a deep neural network architecture with ideal ratio mask estimation in computational speech segregation to improve speech intelligibility
Publication: Research - peer-review › Journal article – Annual report year: 2018

The impact of exploiting spectro-temporal context in computational speech segregation
Publication: Research - peer-review › Journal article – Annual report year: 2018

The mechanisms underlying multiple lobes in SOAE suppression tuning curves in a transmission line model of the cochlea
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

The Role of Place Cues in Voluntary Stream Segregation for Cochlear Implant Users
Publication: Research - peer-review › Journal article – Annual report year: 2018

The role of temporal cues on voluntary stream segregation in cochlear implant users
Publication: Research - peer-review › Journal article – Annual report year: 2018
Toward a more comprehensive understanding of the impact of masker type and signal-to-noise ratio on the pupillary response while performing a speech-in-noise test
Publication: Research - peer-review › Journal article – Annual report year: 2018

Accuracy of averaged auditory brainstem response amplitude and latency estimates
Publication: Research - peer-review › Journal article – Annual report year: 2017

A Model ofElectrically Stimulated Auditory Nerve Fiber Responses with Peripheral and Central Sites of Spike Generation
Publication: Research - peer-review › Journal article – Annual report year: 2017

A Nonlinear Transmission Line Model of the Cochlea With Temporal Integration Accounts for Duration Effects in Threshold Fine Structure
Publication: Research - peer-review › Journal article – Annual report year: 2017

Assessing the efficacy of hearing-aid amplification using a phoneme test
Publication: Research - peer-review › Journal article – Annual report year: 2017

Assessment of broadband SNR estimation for hearing aid applications
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Auditory brainstem response latency in forward masking, a marker of sensory deficits in listeners with normal hearing thresholds
Publication: Research - peer-review › Journal article – Annual report year: 2017

Cascaded Amplitude Modulations in Sound Texture Perception
McWalter, R. I. & Dau, T. 2017 In : Frontiers in Neuroscience. 11, 12 p., 485
Publication: Research - peer-review › Journal article – Annual report year: 2017

Characterizing cochlear hearing impairment using advanced electrophysiological methods
Publication: Research › Ph.D. thesis – Annual report year: 2017

Comparison of objective and subjective measures of cochlear compression in normal-hearing and hearing-impaired listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2018

Contribution of low- and high-frequency bands to binaural unmasking in hearing-impaired listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Data-driven approach for auditory profiling
Effect of musical training on pitch discrimination performance in older normal-hearing and hearing-impaired listeners


Effects of hearing-aid dynamic range compression on spatial perception in a reverberant environment


Effects of slow- and fast-acting compression on hearing impaired listeners’ consonant-vowel identification in interrupted noise


Evaluating a Loudspeaker-Based Virtual Sound Environment using Speech-on-Speech Masking


Exploiting Deep Neural Networks and Head Movements for Robust Binaural Localization of Multiple Sources in Reverberant Environments


Impact of Noise and Noise Reduction on Processing Effort: A Pupillometry Study


Impact of stimulus-related factors and hearing impairment on listening effort as indicated by pupil dilation


Influence of a remote microphone on localization with hearing aids


Influence of binary mask estimation errors on robust speaker identification


Investigating the effects of noise-estimation errors in simulated cochlear implant speech intelligibility


Investigating time-efficiency of forward masking paradigms for estimating basilar membrane input-output characteristics

Lateralized speech perception with small interaural time differences in normal-hearing and hearing-impaired listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Linear combination of auditory steady-state responses evoked by co-modulated tones
Publication: Research - peer-review › Journal article – Annual report year: 2017

Modeling Speech Level as a Function of Background Noise Level and Talker-to-Listener Distance for Talkers Wearing Hearing Protection Devices
Publication: Research - peer-review › Journal article – Annual report year: 2017

Musicians do not benefit from differences in fundamental frequency when listening to speech in competing speech backgrounds
Publication: Research - peer-review › Journal article – Annual report year: 2017

Noise-robust cortical tracking of attended speech in real-world acoustic scenes
Publication: Research - peer-review › Journal article – Annual report year: 2017

On-site and laboratory evaluations of soundscape quality in recreational urban spaces
Publication: Research - peer-review › Journal article – Annual report year: 2017

Pitch matching in bimodal cochlear implant patients: Effects of frequency, spectral envelope, and level
Publication: Research - peer-review › Journal article – Annual report year: 2017

Predicting consonant recognition and confusions in normal-hearing listeners
Publication: Research - peer-review › Journal article – Annual report year: 2017

Predicting effects of additive noise and hearing-instrument signal processing on consonant recognition and confusions
Zaar, J. & Dau, T. 2017
Publication: Research › Poster – Annual report year: 2017

Predicting effects of hearing-instrument signal processing on consonant perception
Publication: Research - peer-review › Journal article – Annual report year: 2017

Predicting effects of hearing-instrument signal processing on consonant recognition and confusions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Prediction of speech intelligibility based on a correlation metric in the envelope power spectrum domain
Publication: Research › Poster – Annual report year: 2017
Preliminary investigation of the categorization of gaps and overlaps in turn-taking interactions: Effects of noise and hearing loss
Publication: Research - peer-review » Article in proceedings – Annual report year: 2018

Preserving spatial perception in rooms using direct-sound driven dynamic range compression
Publication: Research - peer-review » Journal article – Annual report year: 2017

Real-time estimation of eye gaze by in-ear electrodes
Publication: Research - peer-review » Article in proceedings – Annual report year: 2017

Relations Between Self-Reported Daily-Life Fatigue, Hearing Status, and Pupil Dilation During a Speech Perception in Noise Task
Publication: Research - peer-review » Journal article – Annual report year: 2018

Relationship between overall comfort and combined thermal and acoustic conditions in urban recreational spaces
Publication: Research - peer-review » Article in proceedings – Annual report year: 2017

Response to Comment: RE: Ohlenforst et al. (2016) Exploring the Relationship Between Working Memory, Compressor Speed, and Background Noise Characteristics, Ear Hear 37, 137–143
Publication: Research - peer-review » Comment/debate – Annual report year: 2017

Sound specificity effects in spoken word recognition: The effect of integrality between words and sounds
Publication: Research - peer-review » Journal article – Annual report year: 2017

Subcortical and cortical correlates of pitch discrimination: Evidence for two levels of neuroplasticity in musicians
Publication: Research - peer-review » Journal article – Annual report year: 2018

The role of temporal cues in voluntary stream segregation in cochlear implant listeners
Publication: Research - peer-review » Article in proceedings – Annual report year: 2018

The speech-based envelope power spectrum model (sEPSM) family: Development, achievements, and current challenges
Publication: Research - peer-review » Conference abstract in journal – Annual report year: 2017

Verbal attribute magnitude estimates of pulse trains across selectrode places and stimulation rates in cochlear implant listeners
Methodology and apparatus for determining psychoacoustical threshold curves
Fereczkowski, M., MacDonald, E. & Dau, T. 31 Mar 2016
Publication: Research › Patent – Annual report year: 2016

A correlation metric in the envelope power spectrum domain for speech intelligibility prediction
Publication: Research › Peer-review → Poster – Annual report year: 2017

A modular guitar for teaching musical acoustics
Publication: Research › Poster – Annual report year: 2016

A new procedure for automatic fitting of the basilar-membrane input-output function to individual behavioral data.
Publication: Research › Patent – Annual report year: 2016

Archetypal analysis of auditory profiling data towards a clinical test battery
Publication: Research › Poster – Annual report year: 2016

Assessing and modeling apparent source width perception
Publication: Research › Peer-review → Journal article – Annual report year: 2016

Assessing the contribution of binaural cues for apparent source width perception via a functional model
Publication: Research › Peer-review → Article in proceedings – Annual report year: 2016

Auditory features in consonant perception - a modeling perspective
Publication: Research › Peer-review → Article in proceedings – Annual report year: 2016

Auditory-model based assessment of the effects of hearing loss and hearing-aid compression on spectral and temporal resolution
Publication: Research › Peer-review → Article in proceedings – Annual report year: 2016

Auditory profiling and hearing-aid satisfaction in hearing-aid candidates
Publication: Research › Peer-review → Journal article – Annual report year: 2016

Can place-specific cochlear dispersion be represented by auditory steady-state responses?
Publication: Research › Peer-review → Journal article – Annual report year: 2016

Clustering of Cochlear Oscillations in Frequency Plateaus as a Tool to Investigate SOAE Generation
Publication: Research › Peer-review → Journal article – Annual report year: 2016
Comparing eye tracking with electrooculography for measuring individual sentence comprehension duration
Publication: Research - peer-review › Journal article – Annual report year: 2016

Comparing the influence of spectro-temporal integration in computational speech segregation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Complex-Tone Pitch Discrimination in Listeners With Sensorineural Hearing Loss
Publication: Research - peer-review › Journal article – Annual report year: 2016

Complex-tone pitch representations in the human auditory system.
Publication: Research › Ph.D. thesis – Annual report year: 2016

Complex-tones cortical pitch representations in musicians vs. non-musicians
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Cross-correlation model of interaural time difference coding in listeners with bilateral cochlear implants
Joshi, S. N., Dau, T. & Epp, B. 2016
Publication: Research › Poster – Annual report year: 2017

Effect of modulation depth, frequency, and intermittence on wind turbine noise annoyance
Publication: Research - peer-review › Journal article – Annual report year: 2016

Effects of dynamic-range compression on temporal acuity
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Effets d'une compression cochléaire et d'une sélectivité en fréquence réduites sur la discrimination de la hauteur de tons complexes
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Ellipsoidal reflector for measuring otoacoustic emissions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2017

Evaluating the auralization of a small room in a virtual sound environment using objective room acoustic measures
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017

Evaluating the auralization of a small room in a virtual sound environment using objective room acoustic measures
Ahrens, A., Marschall, M. & Dau, T. 2016
Publication: Research › Poster – Annual report year: 2017
Exploring the Relationship Between Working Memory, Compressor Speed, and Background Noise Characteristics
Ohlenforst, B., Souza, P. E. & MacDonald, E. 2016 In : Ear and Hearing. 37, 2, p. 137-143
Publication: Research - peer-review › Journal article – Annual report year: 2016

Extériorisation sonore avec des indices auditifs et visuels discordants
CFA2016/254
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Grid - a fast threshold tracking procedure
Fereczkowski, M., Dau, T. & MacDonald, E. 2016 Advances in Acoustics. Institute of Fundamental Technological Research, Polish Academy of Sciences, p. 545-553
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Impact of Background Noise and Sentence Complexity on Processing Demands during Sentence Comprehension
Wendt, D., Dau, T. & Hjortkjær, J. 2016 In : Frontiers in Psychology. 7, 12 p., 345
Publication: Research - peer-review › Journal article – Annual report year: 2016

Individual Hearing Loss: Characterization, Modelling, Compensation Strategies
Publication: Research - peer-review › Editorial – Annual report year: 2016

Investigating low-frequency compression using the Grid method
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Lateralized speech perception in normal-hearing and hearing-impaired listeners and its relationship to temporal processing
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Model-based fitting of compression settings using narrowband stimuli
Kowalewski, B., Fereczkowski, M., MacDonald, E., Strelczyk, O. & Dau, T. 2016
Publication: Research › Poster – Annual report year: 2016

Modeling spectro - temporal modulation perception in normal - hearing listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Modelling the effect of pulse-rate on coding of interaural time differences in listeners with cochlear implants
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2017

Modelling the Perceptual Components of Loudspeaker Distortion
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Objective and Perceptual Evaluation of a Virtual Sound Environment System.
Cubick, J. & Dau, T. 2016
Publication: Research - peer-review › Poster – Annual report year: 2016
Objective assessment of stream segregation abilities of CI users as a function of electrode separation
Publication: Research › Poster – Annual report year: 2016

On-site and laboratory soundscape evaluations of three recreational urban spaces
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2016

Outcome measures based on classification performance fail to predict the intelligibility of binary-masked speech
Publication: Research - peer-review › Journal article – Annual report year: 2016

Perceptual Spaces Induced by Cochlear Implant All-Polar Stimulation Mode
Marozeau, J. & McKay, C. M. 2016 In: Trends in Hearing. 20, 0, 9
Publication: Research - peer-review › Journal article – Annual report year: 2016

Pitch Discrimination In Musicians and Non-Musicians: Effects of Harmonic Resolvability and Processing Effort
Publication: Research - peer-review › Journal article – Annual report year: 2015

Predicting binaural speech intelligibility using the signal-to-noise ratio in the envelope power spectrum domain
Publication: Research - peer-review › Journal article – Annual report year: 2016

Predicting Detectability and Annoyance of EV Warning Sounds using Partial Loudness
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Predicting effects of non-linear frequency compression and impulse-noise suppression on consonant perception
Publication: Research - peer-review › Poster – Annual report year: 2016

Predicting masking release of lateralized speech
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Predicting speech intelligibility based on a correlation metric in the envelope power spectrum domain
Publication: Research - peer-review › Journal article – Annual report year: 2016

Simultaneous measurement of auditory-steady-state responses and otoacoustic emissions to estimate peripheral compression
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Sources of Variability in Consonant Perception and Implications for Speech Perception Modeling
Publication: Research - peer-review › Book chapter – Annual report year: 2016
A model of auditory nerve responses to electrical stimulation
Joshi, S. N., Dau, T. & Epp, B. 2015

A model of auditory nerve responses to electrical stimulation with pulse train
Joshi, S. N., Dau, T. & Epp, B. 2015

Annoyance of wind-turbine noise as a function of amplitude-modulation parameters
Ioannidou, C., Santurette, S. & Jeong, C-H. 2015

Apparent source width perception in normal-hearing, hearing-impaired and aided listeners

Auditory correlates of stimulus-induced variability in consonant perception

Auditory Processing of Temporal Fine Structure: Effects of Age and Hearing Loss: Book Review

Can auditory steady-state responses reflect place-specific cochlear dispersion?

Comparison of binaural microphones for externalization of sounds

Compensation of F0 and formant frequencies in a real-time pitch-perturbation paradigm
Eckey, A. & MacDonald, E. 2015 Forschritte der Akustik DAGA’15. p. 1444-1447

Cortical pitch representations of complex tones in musicians and non-musicians

Cortical pitch representations of complex tones in musicians and non-musicians

Dichotic Listening Can Improve Perceived Clarity of Music in Cochlear Implant Users

Effect of harmonic rank on the streaming of complex tones
Effects of cochlear compression and frequency selectivity on pitch discrimination of complex tones with unresolved harmonics
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Effects of harmonic roving on pitch discrimination
Santurette, S., de Kérangal, M. L. G. & Joshi, S. N. 2015
Publication: Research - peer-review › Poster – Annual report year: 2015

Effects of harmonic roving on pitch discrimination
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2015

Effects of incongruent auditory and visual room-related cues on sound externalization
Carvajal, J. C. G., Santurette, S., Cubick, J. & Dau, T. 2015
Publication: Research - peer-review › Poster – Annual report year: 2015

Effects of manipulating the signal-to-noise envelope power ratio on speech intelligibility
Publication: Research - peer-review › Journal article – Annual report year: 2015

Effects of musical training on pitch discrimination of resolved and unresolved complex tones
Bianchi, F., Santurette, S., Wendt, D. & Dau, T. 2015
Publication: Research - peer-review › Poster – Annual report year: 2015

Effects of syntactic complexity on word recognition in noise
Kristensen, L. B. & Wendt, D. 2015
Publication: Research - peer-review › Poster – Annual report year: 2015

Evaluation of a clinical auditory profile in hearing-aid candidates
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Evaluation of peripheral compression and auditory nerve fiber intensity coding using auditory steady-state responses
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Evaluation of peripheral compression and auditory nerve fiber intensity coding using Auditory Steady-State Responses (ASSR)
Publication: Research › Sound/Visual production (digital) – Annual report year: 2015

Exploiting deep neural networks and head movements for binaural localisation of multiple speakers in reverberant conditions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Extraction of OAEs During Multi-Frequency ASSR Recordings With the Goal to Estimate Peripheral Compression
Epp, B. & Sanchez, R. 2015
Publication: Research › Poster – Annual report year: 2015
Face configuration affects speech perception: Evidence from a McGurk mismatch negativity study
Eskelund, K., MacDonald, E. & Andersen, T. 2015 In : Neuropsychologia. 66, p. 48-54
Publication: Research - peer-review › Journal article – Annual report year: 2014

Fast assessment of auditory spectral and temporal resolution
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Formant compensation for auditory feedback with English vowels
Publication: Research - peer-review › Journal article – Annual report year: 2015

How Hearing Impairment Affects Sentence Comprehension: Using Eye Fixations to Investigate the Duration of Speech Processing
Publication: Research - peer-review › Journal article – Annual report year: 2015

Impact of background noise and sentence complexity on cognitive processing demands
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Improvements in Elimination of Loudspeaker Distortion in Acoustic Measurements
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Inversion of Auditory Spectrograms, Traditional Spectrograms, and Other Envelope Representations
Decorsière, R. J. B., Søndergaard, P. L., MacDonald, E. & Dau, T. 2015 In : I E E E Transactions on Audio, Speech and Language Processing. 23, 1, p. 46-56
Publication: Research - peer-review › Journal article – Annual report year: 2015

Perceptual Interactions Between Electrodes Using Focused and Monopolar Cochlear Stimulation
Publication: Research - peer-review › Journal article – Annual report year: 2015

Perceptual space induced by cochlear implant all-polar stimulation mode
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Relation between temporal envelope coding, pitch discrimination, and compression estimates in listeners with sensorineural hearing loss
Bianchi, F., Santurette, S., Fereczkowski, M. & Dau, T. 2015
Publication: Research - peer-review › Poster – Annual report year: 2015

Relation between temporal envelope coding, pitch discrimination, and compression estimates in listeners with sensorineural hearing loss
Reproduction of Realistic Background Noise for Testing Telecommunications Devices
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

ROBUST LOCALISATION OF MULTIPLE SPEAKERS EXPLOITING HEAD MOVEMENTS AND MULTI-CONDITIONAL TRAINING OF BINAURAL CUES
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Signs of noise-induced neural degeneration in humans
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Simulation of realistic background noise using multiple loudspeakers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Single channel speech enhancement in the modulation domain: New insights in the modulation channel selection framework
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Sound objects – Auditory objects – Musical objects
Hjortkjær, J. 2015 In : Dansk Musikforskning Online. SPECIAL EDITION, p. 47-56
Publication: Research - peer-review › Journal article – Annual report year: 2015

Sources of variability in consonant perception and their auditory correlates
Publication: Research - peer-review › Journal article – Annual report year: 2015

Sources of variability in consonant perception and their auditory correlates
Publication: Research - peer-review › Journal article – Annual report year: 2015

Spectral Weighting of Binaural Cues: Effect of Bandwidth and Stream Segregation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Speech Intelligibility Evaluation for Mobile Phones.
Publication: Research - peer-review › Journal article – Annual report year: 2015

Spektrale Gewichtung von interauralen Zeit- und Pegelunterschieden zur Lateralisierung von Breitbandsignalen
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015
Statistical representation of sound textures in the impaired auditory system
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

The influence of visual cues on auditory distance perception.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

The role of harmonic resolvability for pitch discrimination
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

The role of reverberation-related binaural cues in the externalization of speech
Publication: Research - peer-review › Journal article – Annual report year: 2015

The role of temporal resolution in modulation-based speech segregation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Time-efficient multidimensional threshold tracking method
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2015

Using eye movements for analyzing the influence of linguistic complexity, noise, and hearing loss on sentence processing time
Wendt, D., Müller, J., Kollmeier, B. & Brand, T. 2015
Publication: Research - peer-review › Poster – Annual report year: 2015

A Danish open-set speech corpus for competing-speech studies
Publication: Research - peer-review › Journal article – Annual report year: 2014

Analyzing processing effort during sentence comprehension in quiet and in noise: Evidence from eye-fixations and pupil size
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Assessing the effects of temporal coherence on auditory stream formation through comodulation masking release
Publication: Research - peer-review › Journal article – Annual report year: 2014

Auditory Perception of Statistically Blurred Sound Textures
McWalter, R. I., MacDonald, E. & Dau, T. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

Capturing and reproducing realistic acoustic scenes for hearing research
Publication: Research › Ph.D. thesis – Annual report year: 2014
Comparison of peripheral compression estimates using auditory steady-state responses (ASSR) and distortion product otoacoustic emissions (DPOAE)
Publication: Research › Poster – Annual report year: 2015

Computational speech segregation based on an auditory-inspired modulation analysis
Publication: Research - peer-review › Journal article – Annual report year: 2014

Consonance perception of complex-tone dyads and chords
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Consonant confusions in frozen and random white noise
Zaar, J., Jørgensen, S. & Dau, T. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

Consonant confusions in frozen and random white noise
Zaar, J., Jørgensen, S. & Dau, T. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

Distortion-product otoacoustic emission reflection-component delays and cochlear tuning: Estimates from across the human lifespan
Publication: Research - peer-review › Journal article – Annual report year: 2014

Effects of spontaneous otoacoustic emissions on pure-tone frequency difference limens
Publication: Research - peer-review › Journal article – Annual report year: 2014

Effects of tonotopy, adaptation, modulation tuning, and temporal coherence in “primitive” auditory stream segregation
Publication: Research - peer-review › Journal article – Annual report year: 2014

Electrophysiological assessment of audiovisual integration in speech perception
(DTU Compute PHD-2014; No. 341).
Publication: Research › Ph.D. thesis – Annual report year: 2014

Eliminating transducer distortion in acoustic measurements
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Ellipsoidal reflector for measuring oto-acoustic emissions
Publication: Research - peer-review › Article in proceedings – Annual report year: 2015

Exploring the physical correlates of consonant recognition and confusions
Deutsche Gesellschaft für Audiologie
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Generalization of Supervised Learning for Binary Mask Estimation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
Human Sound Externalization in Reverberant Environments
Publication: Research › Ph.D. thesis – Annual report year: 2015

Influence of acoustic complexity on spatial release from masking and lateralization.
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Influence of High-Frequency Audibility on Distance Perception
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2014

Influence of high-frequency audibility on the perceived distance of sounds
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Influence of impedance phase angle on sound pressures and reverberation times in a rectangular room
Publication: Research - peer-review › Journal article – Annual report year: 2014

Interaction of Working Memory, Compressor Speed and Background Noise Characteristics
Ohlenforst, B., MacDonald, E. & Souza, P. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

Interaural Place-Mismatch Estimation With Two-Formant Vowels in Unilateral Cochlear- Implant Users
Publication: Research - peer-review › Journal article – Annual report year: 2014

Investigating Interaural Frequency-Place Mismatches via Bimodal Vowel Integration
Publication: Research - peer-review › Journal article – Annual report year: 2014

Maximum Acceptable Vibrato Excursion as a Function of Vibrato Rate in Musicians and Non-musicians
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Modeling auditory-nerve responses to electrical stimulation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Modeling auditory-nerve responses to electrical stimulation
Joshi, S. N., Dau, T. & Epp, B. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

Modeling consonant perception in normal-hearing listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Modeling speech intelligibility based on the signal-to-noise envelope power ratio
(Contributions to hearing research, Vol. 15).
Publication: Research › Ph.D. thesis – Annual report year: 2014
Modeling Speech Intelligibility in Hearing Impaired Listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Native and non-native sentence comprehension in the presence of a competing talker
Publication: Research - peer-review › Poster – Annual report year: 2014

Objective correlates of pitch salience using pupillometry
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Perception of a Sung Vowel as a Function of Frequency-Modulation Rate and Excursion in Normal-Hearing and Hearing-Impaired Listeners
Publication: Research - peer-review › Journal article – Annual report year: 2014

Perceptual Effects of Dynamic Range Compression in Popular Music Recordings
Publication: Research - peer-review › Journal article – Annual report year: 2014

Pitch coding of complex tones in the normal and impaired auditory system
Publication: Research - peer-review › Poster – Annual report year: 2015

Predicting speech release from masking through spatial separation in distance
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Refining a model of hearing impairment using speech psychophysics
Publication: Research - peer-review › Journal article – Annual report year: 2014

Requirements for the evaluation of computational speech segregation systems
Publication: Research - peer-review › Journal article – Annual report year: 2014

Spontaneous otoacoustic emissions are generated by active oscillators clustered in frequency plateaus
Epp, B., Wit, H. & van Dijk, P. 2014
Publication: Research › Poster – Annual report year: 2015

Temporal control and compensation for perturbed voicing feedback
Publication: Research - peer-review › Journal article – Annual report year: 2014

The effect of interaural-time-difference fluctuations on apparent source width
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

The importance of binaural cues for the perception of apparent source width at different sound pressure levels
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014
The musical brain
Publication: Research - peer-review › Book chapter – Annual report year: 2015

The role of auditory spectro-temporal modulation filtering and the decision metric for speech intelligibility prediction
Publication: Research - peer-review › Journal article – Annual report year: 2014

The role of temporal coherence in auditory stream segregation
Christiansen, S. K., Dau, T. & Jepsen, M. L. 2014 Technical University of Denmark, Department of Electrical Engineering. 100 p. (Contributions to hearing research, Vol. 17).
Publication: Research › Ph.D. thesis – Annual report year: 2015

The shape of sounds: Audiovisual integration of visual shapes and musical sounds in the human brain
Hjortkjær, J. 2014
Publication: Research - peer-review › Poster – Annual report year: 2014

A multi-resolution envelope-power based model for speech intelligibility
Publication: Research - peer-review › Journal article – Annual report year: 2012

Analysis of the Auditory System via Sound Texture Synthesis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Arrangements of a pair of loudspeakers for sound field control with double-layer arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Binaural dereverberation based on interaural coherence histograms
Publication: Research - peer-review › Journal article – Annual report year: 2013

Binaural Localization and Detection of Speakers in Complex Acoustic Scenes
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Can comodulation masking release occur when frequency changes could promote perceptual segregation of the on-frequency and flanking bands?
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Causal binary mask estimation for speech enhancement using sparsity constraints
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Cochlear contributions to the precedence effect.
Publication: Research - peer-review › Book chapter – Annual report year: 2013
Contribution of envelope periodicity to release from speech-on-speech masking
Publication: Research - peer-review › Journal article – Annual report year: 2013

Do perceptual consequences of spontaneous otoacoustic emissions reflect a central plasticity effect?
Hansen, R., Santurette, S. & Verhulst, S. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013

Effects of spontaneous otoacoustic emissions on frequency discrimination
Publication: Research - peer-review › Conference article – Annual report year: 2013

Efficient estimates of cochlear hearing loss parameters in individual listeners
Publication: Research - peer-review › Conference article – Annual report year: 2013

Environment-aware ideal binary mask estimation using monaural cues
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Estimates of human cochlear tuning derived from DPOAE reflection-component delays
Publication: Research - peer-review › Poster – Annual report year: 2013

Experimental Evidence for a Cochlear Source of the Precedence Effect
Publication: Research - peer-review › Journal article – Annual report year: 2013

Experimental validation of sound field control with a circular double-layer array of loudspeakers.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Extracting Sound-Source-Distance Information from Binaural Signals
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Frequency-Modulation Vowel Maps in Normal-Hearing and Hearing-Impaired Listeners
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2013

Intelligibility of speech produced in temporally modulated noise
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Interaural bimodal pitch matching with two-formant vowels
Publication: Research - peer-review › Poster – Annual report year: 2013
Interaural bimodal pitch matching with two-formant vowels
Publication: Research - peer-review › Article in proceedings – Annual report year: 2014

Level dependency of auditory stream segregation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Masking Release for Sweeping Masker Components with Correlated Envelopes
Verhey, J. L., Klein-Hennig, H. & Epp, B. 2013 In : J A R O. 14, 1, p. 139-147
Publication: Research - peer-review › Journal article – Annual report year: 2012

Maximum Acceptable Vibrato Excursion as a Function of Vibrato Rate in Musicians and Non-musicians
Vatti, M., Santurette, S., Pontoppidan, N. H. & Dau, T. 2013
Publication: Research - peer-review › Poster – Annual report year: 2014

Modeling auditory evoked potentials to complex stimuli
Publication: Research › Ph.D. thesis – Annual report year: 2013

Modeling Horizontal Localization of Complex Sounds in the Impaired and Aided Impaired Auditory System
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Modeling within- and across-channel processes in comodulation masking release.
Publication: Research - peer-review › Journal article – Annual report year: 2013

Modelling speech intelligibility in adverse conditions.
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Mouth reversal extinguishes mismatch negativity induced by the McGurk illusion
Eskelund, K. & Andersen, T. 2013 In : Multisensory Research. 26, 0, p. 133–134
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Multimodal speech perception
Publication: Research - peer-review › Book chapter – Annual report year: 2013

Multivoxel Patterns Reveal Functionally Differentiated Networks Underlying Auditory Feedback Processing of Speech
Publication: Research - peer-review › Journal article – Annual report year: 2013

Neural correlates of pitch salience using fMRI
Bianchi, F., Santurette, S., Dau, T., Hjortkjaer, J. & Siebner, H. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013
Objective measures of binaural masking level differences and comodulation masking release based on late auditory evoked potentials
Publication: Research - peer-review › Journal article – Annual report year: 2013

Perception and neural representation of tones in conditions of masking release
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2012

Playful Interaction with Voice Sensing Modular Robots
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Predicting speech intelligibility in conditions with nonlinearly processed noisy speech
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

Reliability of procedures used for scaling loudness
Publication: Research - peer-review › Conference article – Annual report year: 2013

Sequential dependencies in magnitude scaling of loudness
Publication: Research - peer-review › Conference article – Annual report year: 2013

Simulating psychophysical tuning curves in listeners with dead regions
Publication: Research - peer-review › Journal article – Annual report year: 2013

Sound-field reconstruction performance of a mixed-order Ambisonics microphone array
Publication: Research - peer-review › Conference article – Annual report year: 2013

Sound Source Distance Estimation in Rooms based on Statistical Properties of Binaural Signals
Georganti, E., May, T., van de Par, S. & Mourjopoulos, J. 2013 In : I E E E Transactions on Audio, Speech and Language Processing. 21, 8, p. 1727-1741
Publication: Research - peer-review › Journal article – Annual report year: 2013

Spectral information for detection of acoustic time to arrival
Publication: Research - peer-review › Journal article – Annual report year: 2013

Spectral integration of interaural time differences in auditory localization
Publication: Research - peer-review › Conference article – Annual report year: 2013

Spectral Integration of Interaural Time Differences in Auditory Localization
Le Goff, N., Buchholz, J. M. & Dau, T. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013

Spectrogram inversion and potential applications for hearing research
Decorsière, R. J. B., Dau, T., Søndergaard, P. L. & MacDonald, E. 2013 Technical University of Denmark, Department of Electrical Engineering.
Publication: Research › Ph.D. thesis – Annual report year: 2013
Speech production in amplitude-modulated noise
Publication: Research - peer-review › Conference article – Annual report year: 2013

Temporal integration near threshold fine structure - The role of cochlear processing
Epp, B., Mauermann, M. & Verhey, J. L. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013

The effect of cochlear nonlinearities on binaural masking level differences
Le Goff, N. & Kohlrausch, A. 2013
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2013

The effect of compression on tuning estimates in a simple nonlinear auditory filter model
Publication: Research - peer-review › Conference article – Annual report year: 2013

The effect of interaural-level-difference fluctuations on the externalization of sound
Publication: Research - peer-review › Journal article – Annual report year: 2013

The influence of masker type on early reflection processing and speech intelligibility (L)
Publication: Research - peer-review › Journal article – Annual report year: 2013

The relation between perceived apparent source width and interaural cross-correlation in sound reproduction spaces with low reverberation
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

The Relationship Between Background Noise Envelope Power and Speech Intelligibility in Adverse Conditions
Jørgensen, S., Decorsiere, R. J. B., MacDonald, E. & Dau, T. 2013
Publication: Research - peer-review › Poster – Annual report year: 2013

The role of across-frequency envelope processing for speech intelligibility
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

The role of across-frequency envelope processing for speech intelligibility
Publication: Research - peer-review › Conference article – Annual report year: 2013

The role of high-frequency envelope fluctuations for speech masking release
Publication: Research - peer-review › Conference article – Annual report year: 2013

The role of high-frequency envelope fluctuations for speech masking release.
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2013

Validation of a Virtual Sound Environment System for Hearing Aid Testing
A computational model of auditory stream segregation based on a temporal coherence analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

A physiologically inspired model of auditory stream segregation based on a temporal coherence analysis
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

A Preliminary Study of Individual Responses to Real-Time Pitch and Formant Perturbations
MacDonald, E. & Munhall, K. G. 2012 The Listening Talker: An interdisciplinary workshop on natural and synthetic modification of speech in response to listening conditions. p. 32-35
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Behavioral and objective measures of the precedence effect
Publication: Research - peer-review › Poster – Annual report year: 2012

Blind estimation of the number of speech source in reverberant multisource scenarios based on binaural signals
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Comodulation Is a Stronger Binding Cue Than the Common Fate of Frequency Swept Components
Publication: Research › Conference abstract for conference – Annual report year: 2012

Control of sound fields with a circular double-layer array of loudspeakers
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Effects of diotic fringes on interaural disparity detection (L)
Publication: Research - peer-review › Journal article – Annual report year: 2012

Effects of Interaural Level and Time Differences on the Externalization of Sound
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Effects of Interaural Level differences on the externalization of sound
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2012

Efficient Algorithms for the Discrete Gabor Transform with a Long Fir Window
Publication: Research - peer-review › Journal article – Annual report year: 2012

High-frequency complex pitch: a search for temporal cues and for a role of spectral indices
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2012

Increased intensity discrimination thresholds in tinnitus subjects with a normal audiogram
Publication: Research - peer-review › Journal article – Annual report year: 2012
Interrelation Between Sensation Level and Auditory Evoked Potentials Under Conditions of Masking Release
Publication: Research › Conference abstract for conference – Annual report year: 2012

Listening in adverse conditions: Masking release and effects of hearing loss
Publication: Research › Ph.D. thesis – Annual report year: 2012

Listening talkers produce great spectral tilt contrasts
Christiansen, T. U., Heegård, J. & Henrichsen, P. J. 2012
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2012

Metrics for performance assessment of mixed-order Ambisonics spherical microphone arrays
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Modeling auditory evoked brainstem responses to transient stimuli
Publication: Research - peer-review › Journal article – Annual report year: 2012

Modeling speech intelligibility in adverse conditions
Dau, T. 2012 The Listening Talker: Proceedings. p. 6-6
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2012

Nonlinear time-domain cochlear model for transient stimulation and human otoacoustic emission
Publication: Research - peer-review › Journal article – Annual report year: 2012

On the possibility of a place code for the low pitch of high-frequency complex tones
Publication: Research - peer-review › Journal article – Annual report year: 2012

Perceptual Confusions Among Consonants, Revisited: Cross-Spectral Integration of Phonetic-Feature Information and Consonant Recognition
Christiansen, T. U. & Greenberg, S. 2012 In : I E E E Transactions on Audio, Speech and Language Processing. 20, 1, p. 147-161
Publication: Research - peer-review › Journal article – Annual report year: 2011

Prediction of speech masking release for fluctuating interferers based on the envelope power signal-to-noise ratio
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Prediction of speech masking release for fluctuating interferers based on the envelope power signal-to-noise ratio
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2012

Reference hearing threshold levels for chirp signals delivered by an ER-3A insert earphone
Publication: Research - peer-review › Journal article – Annual report year: 2012

Relating binaural pitch perception to the individual listener's auditory profile
Publication: Research - peer-review › Journal article – Annual report year: 2012
Relationship between masking release in fluctuating maskers and speech reception thresholds in stationary noise
Publication: Research - peer-review › Journal article – Annual report year: 2012

Relationships between Cochlear Tuning and Delay Probed with a Nonlinear Transmission-Line Model
Publication: Research › Conference abstract for conference – Annual report year: 2012

Representational Similarity Analysis Reveals Heterogeneous Networks Supporting Speech Motor Control
Publication: Research - peer-review › Poster – Annual report year: 2012

Robustness of a Mixed-Order Ambisonics Microphone Array for Sound Field Reproduction
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Sense Meets Nonsense: a dual-layer Danish speech corpus for perception studies
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Simulation zur zeitlichen Integration nahe der Ruhehörschwelle
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Untersuchung zur akustischen Bewegungswahrnehmung mit Hilfe des auditorischen Moments
Publication: Research - peer-review › Article in proceedings – Annual report year: 2012

Word Recognition for Temporally and Spectrally Distorted Materials: The Effects of Age and Hearing Loss
Publication: Research - peer-review › Journal article – Annual report year: 2012

Processing of spatial sounds in the impaired auditory system
Publication: Research › Ph.D. thesis – Annual report year: 2011

A cross-language study of compensation in response to real-time formant perturbation
Publication: Research - peer-review › Journal article – Annual report year: 2011

Application of a circular 2D hard-sphere microphone array for higher-order Ambisonics auralization
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Are binaural recordings needed for subjective and objective annoyance assessment of traffic noise?
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Behavioral estimates of basilar-membrane input-output in normal-hearing listeners
Neural coding and perception of pitch in the normal and impaired human auditory system
Publication: Research › Ph.D. thesis – Annual report year: 2011

On the relationship between multi-channel envelope and temporal fine structure
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Perception of interaural time differences at threshold and suprathreshold levels
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Perceptual Weights for Loudness Judgments of 6-Tone Complexes
Publication: Research - peer-review › Conference abstract for conference – Annual report year: 2011

Perceptual weights for loudness reflect central spectral processing.
Publication: Research - peer-review › Conference abstract in journal – Annual report year: 2011

Pitch perception beyond the traditional existence region of pitch
Publication: Research - peer-review › Journal article – Annual report year: 2011

Predicting speech intelligibility based on the signal-to-noise envelope power ratio after modulation-frequency selective processing
Publication: Research - peer-review › Journal article – Annual report year: 2011

Predicting speech intelligibility in adverse conditions: evaluation of the speech-based envelope power spectrum model
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Predicting the effect of spectral subtraction on the speech recognition threshold based on the signal-to-noise ratio in the envelope domain
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Predicting the intelligibility of processed noisy speech based on the signal-to-noise ratio in the modulation domain
Publication: Research - peer-review › Article in proceedings – Annual report year: 2011

Relations between perceptual measures of temporal processing, auditory-evoked brainstem responses and speech intelligibility in noise
Publication: Research - peer-review › Journal article – Annual report year: 2011

Sound Exposure of Symphony Orchestra Musicians
Speech recognition employing biologically plausible receptive fields

Temporal and Spectral Cues for Musical Timbre Perception in Electric Hearing

Temporal integration of loudness measured using categorical loudness scaling and matching procedures

Temporal suppression of the click-evoked otoacoustic emission level-curve

The influence of spectral characteristics of early reflections on speech intelligibility

The Linear Time Frequency Analysis Toolbox

The role of temporal fine structure information for the low pitch of high-frequency complex tones

Towards a binaural modelling toolbox

A loudspeaker-based room auralisation system for auditory research

Modeling auditory processing and speech perception in hearing-impaired listeners

Hearing aid Amplification at Soft Input Levels

A loudspeaker-based room auralisation (LoRA) system for auditory perception research
Buchholz, J. & Favrot, S. E. 2010
Behavioral Measures of Monaural Temporal Fine Structure Processing
Santurette, S. & Dau, T. 2010
Publication: Research - peer-review › Poster – Annual report year: 2010

Binaural Processing and Spatial Hearing
Publication: Research - peer-review › Book – Annual report year: 2010

Characterizing and modeling dynamic processes in the cochlea using otoacoustic emissions
Verhulst, S., Dau, T., Harte, J. & Christopher A., S. 2010 180 p. (CONTRIBUTIONS TO HEARING RESEARCH; No. 8).
Publication: Research › Ph.D. thesis – Annual report year: 2010

Detection and identification of monaural and binaural pitch contours in dyslexic listeners
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Detection and identification of monaural and binaural pitch contours in dyslexic listeners
Publication: Research - peer-review › Journal article – Annual report year: 2010

Detection of dynamically varying interaural time differences
Publication: Research - peer-review › Article in proceedings – Annual report year: 2010

Equivalent threshold sound pressure levels (ETSPL) for Interacoustics DD 45 supra-aural audiometric earphones
Poulsen, T. 2010 In : International Journal of Audiology. 49, 11, p. 850-855
Publication: Research - peer-review › Journal article – Annual report year: 2010

Estimating individual listeners' auditory-filter bandwidth in simultaneous and non-simultaneous masking
Publication: Research › Article in proceedings – Annual report year: 2010

Externalization versus Internalization of Sound in Normal-hearing and Hearing-impaired Listeners
Publication: Research › Article in proceedings – Annual report year: 2010

Free-field correction values for Interacoustics DD 45 supra-aural audiometric earphones
Poulsen, T. 2010 In : International Journal of Audiology. 50, 6, p. 361-366
Publication: Research - peer-review › Journal article – Annual report year: 2011

Impact of regularization of near field coding filters for 2D and 3D higher-order Ambisonics on auditory distance cues
Publication: Research › Article in proceedings – Annual report year: 2010

Improving hearing aids through listening tests in a virtual sound environment
Publication: Research - peer-review › Journal article – Annual report year: 2010
The Danish hearing in noise test
Publication: Research - peer-review › Journal article – Annual report year: 2011

The Effect of a Voice Activity Detector on the Speech Enhancement
Publication: Research - peer-review › Journal article – Annual report year: 2010

The influence of spectral and spatial characteristics of early reflections on speech intelligibility
Arweiler, I., Buchholz, J. & Dau, T. 2010
Publication: Research - peer-review › Poster – Annual report year: 2010

The Low Pitch of High-Frequency Complex Tones Relies on Temporal Fine Structure Information
Publication: Research - peer-review › Conference abstract in proceedings – Annual report year: 2010

Assessment of speech intelligibility in background noise and reverberation
Nielsen, J. B. & Dau, T. Dec 2009 Kgs. Lyngby, Denmark: Technical University of Denmark (DTU). 122 p. (Contributions to hearing research; No. 5).
Publication: Research › Ph.D. thesis – Annual report year: 2009

Spectro-temporal analysis of complex sounds in the human auditory system
Publication: Research › Ph.D. thesis – Annual report year: 2009

Peripheral auditory processing and speech reception in impaired hearing
Publication: Research › Ph.D. thesis – Annual report year: 2009

A loudspeaker-based room auralization system for auditory perception research
Publication: Research › Article in proceedings – Annual report year: 2009

An Efficient Algorithm for the Discrete Gabor Transform using full length Windows
Publication: Research - peer-review › Conference article – Annual report year: 2009

Comparison of cochlear delay estimates using otoacoustic emissions and auditory brainstem responses
Publication: Research › Journal article – Annual report year: 2009

Detection and identification of monaural and binaural pitch contours in dyslexic listeners
Santurette, S., Dau, T., Poelmans, H., Luts, H. & Wouters, J. 2009
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Development of a Danish speech intelligibility test
Publication: Research - peer-review › Journal article – Annual report year: 2009

Digital Signal Processing for Hearing Instruments
Publication: Research › peer-review › Editorial – Annual report year: 2009
Distance Perception in a loudspeaker-based room auralization system
Publication: Research › Article in proceedings – Annual report year: 2009

Effects of pulsing of the target tone on the audibility of partials in inharmonic complex tones
Publication: Research - peer-review › Journal article – Annual report year: 2009

Equivalent threshold sound pressure levels (ETSPL) for Sennheiser HDA 280 supra-aural audiometric earphones in the frequency range 125 Hz to 8000 Hz
Publication: Research - peer-review › Journal article – Annual report year: 2009

Estimation of cochlear response times using lateralization of frequency-mismatched tones
Publication: Research - peer-review › Journal article – Annual report year: 2009

Fishing for meaningful units in connected speech
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Focused Stimulation in Auditory Implants
Publication: Research › Article in proceedings – Annual report year: 2009

Frequency Selective Filtering of the Modulation Spectrum and its Impact on Consonant Identification
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Importance of temporal fine structure information for the low pitch of high-frequency complex tones
Santurette, S. 2009
Publication: Research › Sound/Visual production (digital) – Annual report year: 2009

Laboratory determination of annoyance of low frequency noise
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Models for the Dynamics of Articulatory Lip Movements
Bothe, H-H. 2009 Proc. 2nd Int. Conf. on Information and Communication Technologies and Accessibility. Springer
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Nachbildung von Störungen der Hör- und Sehbahn für Studien an technischen Kommunikationshilfen
Publication: Research - peer-review › Article in proceedings – Annual report year: 2009

Perceptual effects of Ambisonics on Room Auralization
Favrot, S. E. & Buchholz, J. 2009
Publication: Research › Poster – Annual report year: 2009
Precise Stimulation in Auditory Neuroimplants
Publication: Research › Article in proceedings – Annual report year: 2009

Processing of Binaural Pitch Stimuli in Hearing-Impaired Listeners
Publication: Research › Conference abstract in proceedings – Annual report year: 2009

Recent concepts and challenges in hearing research
Dau, T. 2009
Publication: Research › Conference abstract for conference – Annual report year: 2009

Relation between derived-band auditory brainstem response latencies and behavioral frequency selectivity
Publication: Research - peer-review › Journal article – Annual report year: 2009

Simulation of Auditory-Visual
Publication: Research › Article in proceedings – Annual report year: 2009

Speech intelligibility enhancement by early reflections
Arweiler, I., Buchholz, J. & Dau, T. 2009
Publication: Research › Poster – Annual report year: 2009

Strategies and Results for the Evaluation of the Naturalness of the LIPPS Facial Animation System
Publication: Research › Article in proceedings – Annual report year: 2009

Temporal Adaptation in Click-Evoked Otoacoustic Emissions
Publication: Research › Conference abstract for conference – Annual report year: 2009

TESTPERSON OPERATED 2-ALTERNATIVE FORCED CHOICE AUDIOMETRY COMPARED TO TRADITIONAL AUDIOMETRY
Schmidt, J. H., Brandt, C., Jacob Christensen-Dalsgaard, J., Andersen, T., Bælum, J. & Poulsen, T. 2009
Publication: Research › Ph.D. thesis – Annual report year: 2008

Validation of a loudspeaker-based room auralization system using speech intelligibility measures
Publication: Research › Article in proceedings – Annual report year: 2009

Deriving cochlear delays in humans using otoacoustic emissions and auditory evoked potentials
Publication: Research › Ph.D. thesis – Annual report year: 2008

Amplitude modulation depth discrimination in hearing-impaired and normal-hearing listeners
A virtual auditory environment for investigating the auditory signal processing of realistic sounds
Favrot, S. E. 2008
Publication: Research › Conference abstract for conference – Annual report year: 2008

Estimating the basilar-membrane input-output function in normal-hearing and hearing-impaired listeners
Jepsen, M. L. & Dau, T. 2008
Publication: Research › Conference abstract for conference – Annual report year: 2008

Fine-structure processing, frequency selectivity and speech perception in hearing-impaired listeners
Publication: Research - peer-review › Journal article – Annual report year: 2008

Influence of the task of the listener on preference for gain at soft input levels
Publication: Research - peer-review › Article in proceedings – Annual report year: 2007

Modelling across- and within- channel mechanisms in comodulation masking release
Publication: Research › Article in proceedings – Annual report year: 2008

Open-plan office environments: A laboratory experiment to examine the effect of office noise and temperature on human perception, comfort and office work performance
Publication: Research - peer-review › Article in proceedings – Annual report year: 2008

Pitch perception in hearing-impaired listeners
Santurette, S. & Dau, T. 2008
Publication: Research › Sound/Visual production (digital) – Annual report year: 2008

Questionnaire investigation of musicians’ use of hearing protectors, self reported hearing disorders and their experience of their working environment
Publication: Research - peer-review › Journal article – Annual report year: 2008

Relating the absence of binaural pitch percept to retro-cochlear impairment
Santurette, S. & Dau, T. 2008
Publication: Research - peer-review › Poster – Annual report year: 2008

The perceptual flow of phonetic feature processing
Publication: Research - peer-review › Journal article – Annual report year: 2008

Information from Impact Sounds: Normal and Impaired Hearing
Publication: Research › Ph.D. thesis – Annual report year: 2007

Hearing aid processing of loud speech and noise signals: Consequences for loudness perception and listening comfort.
Publication: Research › Ph.D. thesis – Annual report year: 2007

Constrained ICA for the Analysis of High Stimulus Rate Auditory Evoked Potentials
Linguistic Scene Analysis and the Importance of Synergy

Mechanisms of within- and across- channel processing in comodulation masking release

Training of Speechreading for Severely Hearing-Impaired Persons by Human and Computer

Distant teaching of chamber music via local area networks

Melody recognition with binaural-pitch stimuli in normal-hearing and hearing-impaired listeners
Santurette, S. & Dau, T. 2006

Auditory object formation affects modulation perception

Principles of modulation processing in monaural vs. binaural hearing

A Model for the representation of Speech Signals in Normal and Impaired Ears
Christiansen, T. U. & Poulsen, T. May 2004

Benefit from amplification of high frequencies in hearing impaired: aspects of dead regions and auditory acclimatization
Vestergaard, M. D., Poulsen, T. & Naylor, G. Apr 2004

International hearing protector standardization

Occlusion effects, Part II: A study of the occlusion effect mechanism and the Influence of the earmould properties

Occlusion effects, Part I
On the relations among temporal integration for loudness, loudness discrimination, and the form of the loudness function.

Publication: Research - peer-review › Journal article – Annual report year: 1996

Hearing aid measurements with speech and noise signals

Publication: Research - peer-review › Journal article – Annual report year: 1994

Hearing Threshold and Equal Loudness Level Contours of 1/3-octave Noise Bands in a Diffuse Sound Field

Publication: Research - peer-review › Journal article – Annual report year: 1994

Projects:

Clinical auditory profiling and hearing-aid fitting strategies
Sanchez Lopez, R.
01/07/2016 → 01/07/2019
Project

Spatial release from masking in complex acoustical scenes and the effect of hearing aid processing
Löw, V., Dau, T., Westermann, A., Marschall, M. & Cubick, J.
04/01/2016 → 04/07/2016
Project

The influence of visual cues on sound externalization
Gil Carvajal, J. C., Cubick, J., Santurette, S. & Dau, T.
26/01/2015 → 26/07/2015
Project

Comparison of binaural microphones for externalization of sound
Sánchez Rodríguez, C., Cubick, J., Song, W. & MacDonald, E.
08/01/2015 → 05/07/2015
Project

Evaluation of a clinical auditory profile in hearing-aid candidates
Santurette, S., Thorup, N. & Friis, M.
03/02/2014 → 19/12/2014
Project

Activities:

41st MidWinter Meeting of the Association for Research in Otolaryngology
Paredes Gallardo, A. (Participant)
9 Feb 2018 → 14 Feb 2018
Activity: Attending an event › Participating in or organising a conference

A correlation metric in the envelope power spectrum domain for speech intelligibility prediction
Iborra, H. R. (Guest lecturer)
2017
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

A correlation metric in the envelope power spectrum domain for speech intelligibility prediction
Iborra, H. R. (Guest lecturer)
2017
Activity: Talks and presentations › Conference presentations

**Extending a computational model of auditory processing towards speech intelligibility prediction**
Iborra, H. R. (Guest lecturer)
2017
Activity: Talks and presentations › Conference presentations

**Proceedings of the International Symposium on Auditory and Audiological Research (Journal)**
Santurette, S. (Editor), Dau, T. (Editor)
2017 → …
Activity: Research › Series editor

**An extended test battery for characterizing hearing deficits**
Sanchez Lopez, R. (Speaker), Bianchi, F. (Other), Fereczkowski, M. (Other), Santurette, S. (Other), Dau, T. (Other)
29 Sep 2017
Activity: Talks and presentations › Conference presentations

**University of Salamanca**
Iborra, H. R. (Visiting researcher)
1 Sep 2017 → 31 Dec 2017
Activity: Visiting an external institution › Visiting another research institution

**Trends in Hearing (Journal)**
Iborra, H. R. (Reviewer)
Aug 2017
Activity: Research › Peer review of manuscripts

**International Symposium on Auditory and Audiological Research**
Paredes Gallardo, A. (Participant)
23 Aug 2017 → 25 Aug 2017
Activity: Attending an event › Participating in or organising a conference

**Auditory profiling through computational data analysis**
Sanchez Lopez, R. (Other), Bianchi, F. (Other), Fereczkowski, M. (Other), Santurette, S. (Other), Dau, T. (Other)
19 Aug 2017
Activity: Talks and presentations › Conference presentations

**Conference on Implantable Auditory Prosthesis**
Paredes Gallardo, A. (Participant)
16 Jul 2017 → 21 Jul 2017
Activity: Attending an event › Participating in or organising a conference

**The speech-based envelope power spectrum model (sEPSM) family: Development, achievements, and current challenges**
Iborra, H. R. (Guest lecturer)
29 Jun 2017
Activity: Talks and presentations › Conference presentations

**Listening to music with a cochlear implant: Limitations and possible solutions**
Marozeau, J. (Invited speaker), Santurette, S. (Invited speaker)
8 Mar 2017
Activity: Talks and presentations › Conference presentations

**Nordiske Konference - Hørelse, kognition, kommunikation**
Lamping, W. (Participant), Steffen Spangmose Pedersen (Participant)
8 Mar 2017
Activity: Attending an event › Participating in or organising a conference

**Cochlear**
Bentsen, T. (Visiting researcher)
23 Jan 2017 → 13 May 2017
Activity: Visiting an external institution › Visiting another research institution

**ARCHES/ICANHEAR 2016**
Paredes Gallardo, A. (Participant)
21 Nov 2016 → 23 Nov 2016
Activity: Attending an event › Participating in or organising a conference

**Music and CI symposium**
Paredes Gallardo, A. (Participant)
Activity: Attending an event › Participating in or organising a conference

**Beyond the audiogram: How can we achieve better hearing rehabilitation?**
Santurette, S. (Invited speaker)
9 Sep 2016
Activity: Talks and presentations › Conference presentations

**Dansk Teknisk Audiologisk Selskab**
Sanchez Lopez, R. (Participant)
9 Sep 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

**Effects of musical experience on pitch discrimination**
Santurette, S. (Invited speaker)
9 Sep 2016
Activity: Talks and presentations › Conference presentations

**Interspeech 2016**
Bentsen, T. (Participant)
8 Sep 2016 → 12 Sep 2016
Activity: Attending an event › Participating in or organising a conference

**Poster presentation**
Bentsen, T. (Speaker)
8 Sep 2016 → 12 Sep 2016
Activity: Talks and presentations › Conference presentations

**Academic communication and effective presenting**
Paredes Gallardo, A. (Participant)
8 Aug 2016 → 16 Aug 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

**Improving Cochlear Implant Performance**
Paredes Gallardo, A. (Participant)
1 Jul 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

**International Symposium on Objective Measures in Auditory Implants**
Paredes Gallardo, A. (Speaker)
15 Jun 2016 → 18 Jun 2016
Activity: Talks and presentations › Conference presentations
Predicting speech intelligibility based on a correlation metric in the modulation power domain
Iborra, H. R. (Guest lecturer)
5 Apr 2016
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

Teaching and learning DTU
Paredes Gallardo, A. (Participant)
8 Mar 2016 → 11 Mar 2016
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

The Danavox Jubilee Foundation (Publisher)
Santurette, S. (Editor)
2015 → 2016
Activity: Research › Series editor

EP Master class IV: Cortical Evoked Potentials
Paredes Gallardo, A. (Participant)
3 Dec 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Talk at Audiological Research Cores in Europe
Bentsen, T. (Speaker)
17 Nov 2015
Activity: Talks and presentations › Conference presentations

INTERSPEECH 2015
Bentsen, T. (Participant)
6 Sep 2015 → 10 Sep 2015
Activity: Attending an event › Participating in or organising a conference

Analysis of correlated data: Mixed Linear Models
Paredes Gallardo, A. (Participant)
1 Sep 2015 → 25 Dec 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Communicating Advanced Topics in Electrical Engineering
Paredes Gallardo, A. (Participant)
1 Sep 2015 → 25 Dec 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Evaluation of peripheral compression and auditory nerve fiber intensity coding using Auditory Steady-State Responses (ASSR)
Encina Llamas, G. (Speaker)
27 Aug 2015
Activity: Talks and presentations › Conference presentations

5th International Symposium on Auditory and Audiological Research
Paredes Gallardo, A. (Participant)
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

The Analysis of Sensory and Consumer Data
Paredes Gallardo, A. (Participant)
17 Aug 2015 → 21 Aug 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.
Introduction to applied statistics and R for PhD students
Paredes Gallardo, A. (Participant)
4 Jun 2015 → 28 Jun 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Evaluation of cochlear processing and auditory nerve fiber intensity coding using Auditory Steady-State Responses (ASSR)
Encina Llamas, G. (Speaker)
11 May 2015
Activity: Talks and presentations › Conference presentations

Improving Performance with Cochlear Implants
Paredes Gallardo, A. (Participant)
21 Apr 2015
Activity: Attending an event › Participating in or organising workshops, courses, seminars etc.

Fra øre til hjørne: tværfaglig forskning i hørelse og kognition
Santurette, S. (Invited speaker)
18 Mar 2015
Activity: Talks and presentations › Conference presentations

7th Workshop on Speech in Noise
Santurette, S. (Organizer)
8 Jan 2015 → 9 Jan 2015
Activity: Attending an event › Participating in or organising a conference

7th Workshop on Speech in Noise
Bentsen, T. (Participant)
8 Jan 2015 → 9 Jan 2015
Activity: Attending an event › Participating in or organising a conference

5th International Symposium on Auditory and Audiological Research
Santurette, S. (Organizer)
2014 → 2015
Activity: Attending an event › Participating in or organising a conference

Concepts and computational models of robust bottom-up signal encoding
Santurette, S. (Organizer)
30 Jan 2014 → 1 Feb 2014
Activity: Attending an event › Participating in or organising a conference

The Danavox Jubilee Foundation (Publisher)
Santurette, S. (Editor)
2013 → 2014
Activity: Research › Series editor

21st International Congress on Acoustics
Le Goff, N. (Speaker)
2 Jun 2013 → 7 Jun 2013
Activity: Talks and presentations › Conference presentations

36th Annual Midwinter Meeting of the Association for Research in Otolaryngology
Le Goff, N. (Participant)
16 Feb 2013 → 20 Feb 2013
Activity: Attending an event › Participating in or organising a conference
International Symposium on Auditory and Audiological Research
Santurette, S. (Organizer)
2012 → 2013
Activity: Attending an event › Participating in or organising a conference

6th Annual Meeting of the Audiological Research Cores in Europe
Santurette, S. (Organizer)
Nov 2012
Activity: Attending an event › Participating in or organising a conference

Spontane Otoakustische Emissionen - generiert durch aktive Oszillatoren gruppiert in Frequenzplateaus
Epp, B. (Invited speaker)
12 Mar 2012
Activity: Talks and presentations › Conference presentations

35th MidWinter Meeting of the Association for Research in Otolaryngology
Bianchi, F. (Participant)
Feb 2012
Activity: Attending an event › Participating in or organising a conference

Assistive Technology for People with Vision and Hearing Impairments
Bothe, H. (Speaker)
5 Sep 2010
Activity: Talks and presentations › Conference presentations

Lippenlesen im Dialog mit dem Computer
Bothe, H. (Speaker)
9 Aug 2010
Activity: Talks and presentations › Talks and presentations in private or public companies and organisations

ThinkingHead – eine dialogfähige Computeranimation, die für das Erlernen des Absehens eingesetzt werden kann
Bothe, H. (Speaker)
7 Feb 2010
Activity: Talks and presentations › Conference presentations

Models for the dynamics of articulatory lip movements
Bothe, H. (Speaker)
5 Jul 2009
Activity: Talks and presentations › Conference presentations

Auditory neuroprostheses
Bothe, H. (Speaker)
3 May 2009
Activity: Talks and presentations › Conference presentations

ISO TC 43/WG 1: Threshold of hearing (External organisation)
Poulsen, T. (Participant)
1980 → ...
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar

ISO TC43/SC 1/WG 17: Methods of measurement of sound attenuation of hearing protectors (External organisation)
Poulsen, T. (Participant)
1975 → ...
Activity: Membership › Membership of committees, commissions, boards, councils, associations, organisations, or similar
Prizes:

ISAAR scholarship
Helia Relano Iborra (Recipient), 2017
Prize: Prizes, scholarships, distinctions

Outstanding Paper by a Young Presenter
A. Josefine Sørensen (Recipient), Nov 2016
Prize: Prizes, scholarships, distinctions

Student Travel Award
Andreu Paredes Gallardo (Recipient), 16 Jul 2017
Prize: Prizes, scholarships, distinctions

Young Researcher Award 2016
A. Josefine Sørensen (Recipient), Lærke Cecilie Bjerre (Recipient) & Thea Mathilde Larsen (Recipient), 12 May 2016
Prize: Prizes, scholarships, distinctions

Press clippings:

Nørderne kommer
Sébastien Santurette
17/05/2014
1 media contribution
Press / Media