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## From HSR

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# Main: Publications

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Bibliography: Allen bibliography **pdf**, Complete list: **pdf** (Note: This list includes items that were **never** published!)

## 2014

### audiogenic seizures

1. Poon, E, Bandara, SB, Allen, JB, Sadowski, RN, Schantz, SL, *Developmental PCB exposure increases susceptibility to audiogenic seizures in adulthood*, Neurotoxicology. 2014 Dec 24;46C:117-124. doi: 10.1016/j.neuro.2014.12.007; **PCB**

### Speech perception

1. Toscano, Joseph and Allen, Jont B (2014) *Across and within consonant errors for isolated syllables in noise*, Journal of Speech, Language, and Hearing Research, Accepted July 25, 2014; doi:10.1044/2014\_JSLHR-H-13-0244, (**JSLHR, pdf**)
2. Scheidiger, C., Allen, Jont B. (2014). "Effects of NALR on consonant-vowel perception," **4th International Symposium on Auditory and Audiological Research** (ISAAR-2013); The Danaovox Jubilee Foundation, Nyborg Denmark; (**ISAAR-13, pdf**)
3. Trevino, Andrea C, Allen, Jont B (2014). "Systematic Groupings in Hearing Impaired Consonant Perception," **4th International Symposium on Auditory and Audiological Research** (ISAAR-2013); The Danaovox Jubilee Foundation, Nyborg Denmark; (**ISAAR-13, pdf**)

### Middle ear models

1. Allen Jont B. (2014). *The relations between tympanic membrane higher order modes and standing waves*. In **Proceedings of the 12th International Mechanics of Hearing Workshop** (Proceedings Title TBD), Corey DP, Karavitaki KD (eds). American Institute of Physics, Melville, NY, pp. TBD. (**pdf**)
2. Robinson, Sarah, Thompson, Suzanne, Allen, Jont B. (2014). *Characterizing the eardrum admittance: comparisons of tympanometry and reflectance*, In **Proceedings of the 12th International Mechanics of Hearing**

**Workshop** (Proceedings Title TBD), Corey DP, Karavitaki KD (eds).  
American Institute of Physics, Melville, NY, pp. TBD.

## Hearing Aid receiver model (Presentation)

1. Kim, Noori (2014), *Analysis and measurement of anti-reciprocal systems*,  
**PhD Thesis**
2. Kim, Noori and Allen, Jont B (2014) *Historic transducers: Balanced Armature Receiver (BAR)*, ASA meeting INDY, IN, Oct 30, 2014 **pdf**

## 2013

### Speech perception in HI ears

1. Allen, Jont B, Trevino, Andrea C, Scheidiger, Chris (2013). "Consonant confusions in normal and hearing impaired ears -- Consonant Acoustic Feature Processing," *Audiology-online* (**Online-presentation**)
2. Trevino, Andrea C and Allen, Jont B (2012). "Within-Consonant Perceptual Differences in the Hearing Impaired Ear," *JASA* v134(1); Jul, 2013, pp 607--617 (**pdf**)
3. Trevino, Andrea and Allen, Jont B (2013). "Individual Variability of Hearing Impaired Consonant Perception," *Seminars in Hearing*, Guest Editor: Jason Galster PhD.; (**pdf**)

### Clinical ME measurements

1. Michal L. Reuven, Stephen T. Neely, Judy G. Kopun, Daniel M. Rasetshwane, Jont B. Allen, Hongyang Tan, and Michael P. Gorga (2013). "Effect of calibration method on distortion-product otoacoustic emission measurements at and around 4 kHz," *Ear and Hearing*; Vol 34(6), p.779-788, 2013. (**pdf**)
2. Nguyen, CT; Robinson, SR; Jung, W; Novak, MA; Boppart, SA; Allen, Jont B (2013). "Investigation of bacterial biofilm in the human middle ear using optical coherence tomography and acoustic measurements," *Hearing Research* (special MEMRO 2013 issue), v. 301 pp 193-200 (**ScienceDirect.com, pdf**), **PubMed**
3. Robinson, Sarah; Nguyen, Cac; Allen, Jont B (2013). "Characterizing the ear canal acoustic impedance and reflectance by pole-zero fitting" *Hearing Research*, special MEMRO 2013 issue (**pdf**)

### Hearing Aid Transducer models

1. Kim, Noori and Allen, Jont B (2013). "Two-port network Analysis and Modeling of a Balanced Armature Receiver, "Hearing Research, special MEMRO 2013 issue (**pdf**)

## 2012

### Human Speech perception

1. Riya Singh and Jont Allen (2012); "The influence of stop consonants' perceptual features on the Articulation Index model," J. Acoust. Soc. Am., apr v131,3051-3068 (**pdf**)
2. Li, F., Trevino, A., Menon, A. and Allen, Jont B (2012). "A psychoacoustic method for studying the necessary and sufficient perceptual cues of American English fricative consonants in noise" J. Acoust. Soc. Am., v132(4) Oct, pp. 2663-2675 **pdf**
3. Allen, Jont B, Trevino, Andrea, Han, Woojae (2012); "Speech perception in impaired ears," Presentation at the AG Bell Research Symposium, Scottsdale AZ, Jul 1; (**event,djvu,pdf,doc**)
4. Yoon, Y., Allen, Jont B and Gooler, D. (Apr 2012). *Relationship between Consonant Recognition in Noise and Hearing Threshold*, J. of Speech, Language and Hearing Research, doi: 10.1044/1092-4388(2011/10-0239), (**pdf**)
5. Kapoor, Abhinav and Allen, Jont B. (2012) "Perceptual Effects of Plosive Feature Modification," JASA v131(1) Jan, pp. 478-491 (2012) (**pdf**)

### Clinical measurements of the ME

1. Nguyen, Cac 'et al' (2012): "Noninvasive in vivo optical detection of biofilm in the human middle ear") **pnas, html, link**
2. Allen (2012); MEMRO 2012 Presentation on Reflectance measures of middle ear diagnostics: "Reflections from the round window"; **pdf**)

### Horn acoustics

1. Daniel Rasetshwane, Stephen Neely, Jont Allen, and Christopher Shera (2012); "Reflectance of acoustic horns and solution of the inverse problem"; JASA Vol. **131**(3) Mar., p. 1863-1873, 2012. (**pdf**)

## 2011

### Speech perception

1. Jont B. Allen and Woojae Han. (2011). *Sources of decoding errors of the perceptual cues, in normal and hearing impaired ears*, Due to a printing error, this was published (as a correction) in the '4th International Symposium on Auditory and Audiological Research' titled *Auditory Plasticity - Listening with the Brain (2014)*, p. 495-510 (thus failing to appear in *Speech Perception and Auditory Disorders*, the 3d Danaovox Jubilee Foundation symposium, Nyborg Denmark"); (**pdf, Oral Presentation, Session 3 @ 1PM**)
2. Feipeng Li and Jont B. Allen. (2011) *Manipulation of Consonants in Natural Speech*; IEEE Trans. Audio, Speech and Language processing, (officially published: Jul, 2010; Appearance date: Mar 2011) pp. 496-504. (**pdf, VideoDemos**)
3. Lobdell, Bryce, Allen, Jont and Hasawaga-Jonhson, Mark (2011) *Intelligibility predictors and neural representation of speech*, Speech communication 53, pp. 185-194 . (**PDF**)

## 2010

### Speech Perception

1. F. Li, A. Menon, and Jont B Allen, (2010) *A psychoacoustic method to find the perceptual cues of stop consonants in natural speech*, *ap, J. Acoust. Soc. Am.* pp. 2599-2610, (**pdf**)

### Bone conduction model

1. Weece, R. and Allen, Jont B, "A clinical method for calibration of bone conduction transducers to measure the mastoid impedance," *Hearing Research* 263:216--223 (2010). (**pdf,djvu**) (MEMRO June 23, 2009, Stanford University)

### Tympanic membrane model

1. Parent, Pierre and Allen, Jont (2010) *Wave model of the human tympanic membrane*; *Hearing Research* 263:152--167; (**pdf, djvu**) (MEMRO, Stanford University, June 23, 2009)
2. Allen, Jont B and Jeng, Patricia (May 11, 2010), "System and method for automatically adjusting hearing aid based on acoustic reflectance" US Patent 7,715,577 (**http, pdf**)

### Middle Ear Calibration using FPL

1. Robert Withnell, Patricia S. Jeng, William Shofner, and Jont Allen (2010)

*In-situ calibrated sound signals and hearing sensitivity*, POMA Volume 9, pp. 030003 (August 2010) (**pdf**)

## 2009

### Speech Perception

1. S. A. Phatak, Y. Yoon, D. M. Gooler, and Jont B Allen (2009) *Consonant loss profiles for hearing impaired listeners*, *J. Acoust. Soc. Am.*, pp 2683-2694, Nov (**pdf**)
2. Allen, Jont and Li, Feipeng (2009). *Speech perception and cochlear signal processing*, *IEEE Signal Processing Magazine*, Invited: *Life-sciences*, **26**(4), pp 73-77, July. (**pdf, djvu**)
3. Feipeng Li and Jont B. Allen. (2009) *Multiband product rule and consonant identification*, *J. Acoust. Soc. Am.*; **126**(1),347-353, Jul (**pdf,djvu**)
4. Trevino, A, Coleman, T., Allen, Jont (2009). *A Dynamical Point Process Model of Auditory Nerve Spiking in Response to Complex Sounds*, *Journal of Computational Neuroscience*, Available in electronic format (**djvu**)
5. Allen, Jont B. and R'egnier, Marion and Phatak, Sandeep and Li, Feipeng (2009); *Nonlinear Cochlear Signal Processing and phoneme perception* In N. P. Cooper & D. T. Kemp (Eds.), *Proceedings of the 10th Mechanics of Hearing Workshop*. *World Scientific Publishing Co.*, pp 93--105 (**djvu, pdf**); Invited: **Plenary talk (slides)**

### Middle ear Calibration & WAI

1. Robert H. Withnell, Pierre Parent, Patricia S. Jeng and Jont B. Allen (2009) *Using Wideband reflectance to measure the impedance of the middle ear*, *The Hearing Journal*, pp 36-41, Oct (**url, pdf**)
2. RH Withnell, PS Jeng, Kelly Waldvogel, Kari Morgenstein, and Jont B. Allen (2009) *An in-situ calibration for hearing thresholds*, 'J. Acoust. Soc. Am.', **125**(3):1605--1611, March (**pdf**)
3. Neely, S.T. & Allen, Jont B (2009). *Retrograde waves in the cochlea*. In N. P. Cooper & D. T. Kemp (Eds.), *Proceedings of the 10th Mechanics of Hearing Workshop*. *World Scientific Publishing Co.*, pp. 62--67, (**pdf, djvu**)

## 2008

### Speech Perception

1. Allen, Jont B., (2008) "Nonlinear Cochlear Signal Processing and Masking in speech perception", **Springer Handbook on speech processing**,

- Springer, 2008, *Editors: Benesty, Jacob and Sondhi, Mohan*, pp 1-36, Chap. 3 (**BUY, djvu, pdf**)
- Allen, JB, Li, F. Et Al. "Nonlinear cochlear signal processing and phoneme recognition," *Mech. of Hearing Keele*, 2008 (**djvu, pdf**)
  - Phatak, S., Lovitt, Andrew and Allen, Jont B., "Consonant confusions in white noise," *J. Acoust. Soc. Am.*, (2008) 124(2) Aug, p 1220-1233. (**djvu, pdf**)
  - Regnier, M. and Allen, Jont B., (2008) "A method to identify noise-robust perceptual features: application for consonant /t/" *J. Acoust. Soc. Am.*, May, p. 2801-2814, (**djvu, pdf**)

## Middle ear impedance & WAI

- PS Jeng, Jont Allen, JA Miller, and Harry Levitt., (2008) "Wideband power reflectance and power transmittance as tools for assessing middle-ear function." *Perspectives on Hearing and Hearing Disorders in Childhood*, 18(2):44--57. *ASHA journal* (**pdf, djvu**)

## 2007

### Middle ear & TM wave-model

- Parent, P. and Allen, Jont B, (2007) "Wave model of cat tympanic membrane," *J. Acoust. Soc. Am.*, **122**(2), p. 918-931. (**pdf**)

### Speech Perception

- Phatak, S. A. and Allen, Jont B, (2007) "Consonant and vowel confusions in speech-weighted noise," *J. Acoust. Soc. Am.*, **121**(4), p. 2312-2326. (**pdf**)
- Lobdell, B. and Allen, Jont B, (2007) "A model of the VU (volume-unit) meter, with speech applications", *J. Acoust. Soc. Am.* **121**(2007), p. 279-285. (**pdf**)
- Allen, Jont B. and Chan, Wai-Yip and Voran, Stephen, (2007) *Perceptual models for Speech, Audio and Music Processing*, EURASIP "Journal on Audio, Speech, and Music Processing" p. 1-2, (**Editorial**)

## 2006

- Lovitt, Andrew and Allen, Jont B., *50 years late: Repeating Miller-Nicely 1955*, ICSLP 2006 (**pdf**)
- Grimault, N and McAdams, S. and Allen, Jont B., *Auditory scene analysis: a prerequisite for loudness perception*, Book Title: "International Symposium

Hearing Oldenburg Germany" Publisher **Springer** Eds: Kollmeier, Birger and Klump, Georg. **pdf**

3. Sen, D. and Allen, Jont B., *Functionality of cochlear micromechanics--as elucidated by the upward spread of masking and two tone suppression* "Acoustics Australia" April Vol. 34(1), p. 43-51 }, Sen Allen (2006) (**pdf, journal, pdf**)

## 2005

1. Allen, Jont B, (2005) "Articulation and Intelligibility," *Speech and Audio Processing Lectures, Pub: Morgan and Claypool, LaPorte, CO, ISBN-1598290088. (BUY,djvu)*
2. Allen, Jont B, (2005) "Consonant recognition and the articulation index," *J. Acoust. Soc. Am.*, **117**(4), p. 2212-2223. (**pdf**)
3. Allen, Jont B and Jeng, P. S. and Levitt, H., (2005) "Evaluating Human Middle Ear Function via an Acoustic Power Assessment" *Jol. of Rehabil. Res. Dev.*, **42**(4), p. 63-78. (**pdf**)
4. Allen, Jont B and Fahey, Paul (2005) "Outer hair cell mechanics reformulated with acoustic variables" *Mechanics of Hearing 2014 (pdf)*

## 2004

1. Allen, Jont (2004). "The Articulation Index is a Shannon channel capacity," in *Auditory Signal Processing: Physiology, Psychoacoustics, and Models*, edited by D. Pressnitzer, A. de Cheveigne', S. McAdams, and L. Collet (Springer Verlag, New York), pp. 314-320. (ISH.03.pdf; /zear/usr/local/MM/Djvu/PDFSandGZ/ISH-Book-2003.pdf)

## 2003

1. Allen, Jont B, (2003) "Amplitude compression in hearing aids"; In R. Kent, editor, *MIT Encyclopedia of Communication Disorders*, chapter Part IV, pages 413-423; MIT Press, MIT, Boston Ma, 2003 (**pdf**)

## 2001

1. Allen, Jont B. (2001) "Nonlinear Cochlear Signal Processing"; Chapter 19, pp 393-442; "Physiology of the Ear," Second Edition; Eds Jahn, A.F. and Santos-Sacchi, J.; Singular Thomson Learning, San Diego, CA 92101 (**pdf**)
2. Saul, L.K. and Rahim, M.R. and Allen, Jont B. (2001) "A statistical model for robust integration of narrowband cues in speech"; *Computer Speech and Language*, **15** pp 175--194, (**pdf**)

## 1999

1. Allen, Jont B. (1999) "Derecruitment by multiband compression in hearing aids"; In Berlin, Charles I., editor, *The Efferent Auditory System*, chapter **4**, pages 73-86. Singular, 401 West A St., Suite 325, San Diego, CA 92101, 1999. This book includes a CDROM video talk by J. B. Allen in MP3 format.
2. Allen, Jont B. (1999) "Psychoacoustics."; In J.G. Webster, editor, *Wiley Encyclopedia of Electrical and Electronics Engineering*, volume **17**, pages 422-437. John Wiley & Sons, Inc, New York, NY. **pdf**

## 1998

1. Puria, S. and Allen, Jont B. (1998) " Measurements and model of the cat middle ear: Evidence for tympanic membrane acoustic delay "; *J. Acoust. Soc. Am.*, **104** (6) pp 3463--3481, December (**pdf, djvu**)

## 1997

1. Allen, Jont B. and Neely, S. T. (1997) "Modeling the relation between the intensity JND and loudness for pure tones and wide-band noise"; *J. Acoust. Soc. Am.*, **102** (6) pp 3628--3646, December **djvu**
2. Allen, Jont B. (1997) "A Short History of Telephone Psychophysics"; *J. Audio Eng. Soc.*, **Reprint 4636** pp 1-37, September Order from the AES..
3. Fahey, P. F. and Allen, Jont B. (1997) "Measurement of distortion product phase in the ear canal of cat"; *J. Acoust. Soc. Am.*, **102** (5) pp 2880--2891, Nov (**pdf**)
4. Kimberley, B. P., Brown, D. K., and Allen, Jont B. (1997); "Distortion product emissions and sensorineural hearing loss"; In M.S. Robinette and T.J. Glattke, editors, *Otoacoustic emissions, Clinical Applications*, pages 181-204, New York, Stuttgart, Thieme.

## 1996

1. Allen, Jont B. (1996) "Harvey Fletcher's role in the creation of communication acoustics"; *J. Acoust. Soc. Am.*, **99** (4) pp 1825--1839, April (**pdf**); **Invited:** Rewrite of material from preface of the 1995 ASA Edition of Fletcher's 1953 book, with some important additions on Fletcher's critical band.
2. Jont B. Allen. (1996) "DeRecruitment by multiband compression in hearing aids"; In B. Kollmeier, editor, *Psychoacoustics, speech, and hearing aids*, pages 141-152. World Scientific Press, Singapore, 1996. (This article is nearly identical to a book chapter, having the same title, published in 1999)



## 1994

1. Allen, Jont B. (1994) "How do humans process and recognize speech?"; *IEEE Transactions on Speech and Audio*, **2** (4) pp 567-577, October ([pdf](#))
2. Voss, S. E. and Allen, Jont B. (1994) "Measurement of acoustic impedance and reflectance in the human ear canal"; *J. Acoust. Soc. Am.*, **95** (1) pp 372-384, January ([pdf](#))

## 1993

1. Allen, J. B. and Lonsbury-Martin, B. L. (1993) "Otoacoustic emissions"; *J. Acoust. Soc. Am.*, **93** (1) pp 568-569, January
2. Allen, J. B. and Fahey, P. F. (1993) "A second cochlear-frequency map that correlates distortion product, neural tuning measurements"; *J. Acoust. Soc. Am.*, **94** (2, Pt. 1) pp 809-816, August ([pdf](#))
3. Berkley, D. A. and Allen, J. B. (1993); "Normal listeners in typical rooms: the physical, psychophysical correlates of reverberation"; In G. Studebaker and I. Hochberg, editors, *Acoustical Factors Affecting Hearing Aid Performance*, pages 3-14, Allyn, Bacon, Boston, second edition.

## 1992

1. Allen, J. B. and Fahey, P. F. (1992) "Using acoustic distortion products to measure the cochlear amplifier gain on the basilar membrane"; *J. Acoust. Soc. Am.*, **92** (1) pp 178-188, July, ([pdf](#))
2. J. B. Allen and S.T. Neely. "Micromechanical models of the cochlea" *PhysicsToday*, **45(7):40-47**, 1992. ([djvu](#))

## 1991

1. Puria, S. and Allen, J. B. (1991) "A parametric study of cochlear input impedance"; *J. Acoust. Soc. Am.*, **1** (89) pp 287-309, January, ([djvu](#))

## 1990

### Loudness measurement

1. Allen, J. B. and Hall, J. L. and Jeng, P. S. (1990) "Loudness growth in 1/2--octave bands (LGOB)---A procedure for the assessment of loudness"; *J. Acoust. Soc. Am.*, **88** (2) pp 745-753, August, ([pdf](#))

## 1988

1. J. B. Allen. (1988) "Cochlear signal processing"; In A. F. Jahn and J. Santos-Sacchi, Editors; *Physiology of the ear*, pages 243-270. Raven Press, 1988. **pdf**

## 1986

1. Allen, J.B. (1986). "Measurement of the eardrum impedance"; *Mechanics of Hearing*, Delft. **pdf, cleaned up pdf**

## 1985

### Cochlear modeling

1. Fahey, P. F. and Allen, J. B. (1985) "Nonlinear phenomena as observed in the ear canal, and at the auditory nerve"; *J. Acoust. Soc. Am.*, **77** (2) pp 599-612, February
2. Sandberg, I. W. and Allen, J. B. (1985) "Almost periodic response determination for models of the basilar membrane"; *AT&T Tech. Jol.*, **64** (8) pp 1775-1786, October
3. Allen, J. B. (1985); "Cochlear modeling"; *IEEE ASSP Magazine*, **2**(1):3-20.

## 1983

### Cochlear modeling

1. Allen, J. B. (1983) "Magnitude and phase-frequency response to single tones in the auditory nerve"; *J. Acoust. Soc. Am.*, **73** (6) pp 2071-2092, **(pdf)**
2. Allen, J. B. (1983). *Hair cell model of neural response*, In Conf proceedings of the first mechanics of hearing meetin, Delft Holland, July Editors E. de Deboer and Max Viergever, Martinus Nijhoff, Kluwer Academic Publishing Group, The Hague, and Delft University Press. **djvu**

## 1982

1. Yarlagadda, R. and Allen, J. B. (1982) "Aliasing errors in short-time analysis"; *Signal Processing*, **4** pp 79-84,

## 1980

### Cochlear modeling

1. Allen, J. B. (1980) "Cochlear micromechanics: A physical model of transduction"; *J. Acoust. Soc. Am.*, **68** (6) pp 1660-1670, **djvu**
2. J. B. Allen. "Cochlear modeling - 1980"; In Mark H. Holmes and Lester A. Rubenfeld, editors, *Lecture notes in biomathematics: Mathematical modeling of the Hearing Process*, volume **43**, pages 1-8, New York, 1981. SpringerVerlag.

### DSP

1. Rabiner, L. R. and Allen, J. B. (1980) "On the implementation of a short-time analysis method for system identification"; *IEEE Trans. on Acoust. Speech and Sig. Processing*, **ASSP-28** (1) pp 69-78, February **pdf**
2. Smith, J. O. and Allen, J. B. (1980) "Variable bandwidth adaptive delta modulation"; *Bell System Tech. Jol.*, pp 719-737, Jan-Jun

## 1979

### Digital signal processing

1. Allen, J. B. (1979) "FASTFILT - An FFT-based filtering program (Chapter 3)"; *Digital signal processing programs*, pp 1-9,
2. Allen, J. B. and Rabiner, L. R. (1979) "Unbiased spectral estimation, system identification using short-time spectral analysis methods"; *Bell System Tech. Jol.*, **58** (8) pp 1743-1763, October (**pdf**)
3. Allen, J. B. and Rabiner, L. R. (1979) "Unbiased spectral estimation, system identification using short-time spectral analysis methods"; *Bell System Tech. Jol.*, **58** (8) pp 1743-1763, October (**pdf**)
4. Rabiner, L. R. and Allen, J. B. (1979) "Short-time Fourier analysis techniques for FIR system identification, power spectrum estimation"; *IEEE Trans. on Acoust. Speech and Sig. Processing*, **ASSP-27** (2) pp 182-192, April

### Cochlear modeling

1. Allen, J. B. (1979) "Cochlear models - 1978"; In "Models of the auditory system and related signal processing techniques," pp 1-16, Eds: Hoke, M and DeBoer, E. (**djvu, pdf**)
2. Allen, J. B. and Sondhi, M. M. (1979) "Cochlear macromechanics:

Time-domain solutions"; *J. Acoust. Soc. Am.*, **66** (1) pp 120-132, July **pdf**

## Room acoustics

1. Allen, J. B. and Berkley, D. A. (1979) "Image method for efficiently simulating small-room acoustics"; *J. Acoust. Soc. Am.*, **65** pp 943-950, (**pdf** <sup>Δ</sup>)
2. Neely, S. T. and Allen, J. B. (1979) "Invertability of a room impulse response"; *J. Acoust. Soc. Am.*, **66** pp 165-169 (**pdf,djvu**)

## 1978

### Digital signal processing

1. Rabiner, L. R. and Crochiere, R. E. and Allen, J. B. (1978) "FIR system modeling, identification in the presence of noise and with band limited inputs"; *IEEE Trans. on Acoust. Speech and Sig. Processing*, **ASSP-26** (4) pp 319-333, August **pdf**<sup>?</sup>

## 1977

### Cochlear Mechanics

1. Allen, J. B. (1977) "Two-dimensional cochlear fluid model: New results"; *J. Acoust. Soc. Am.*, **61** (1) pp 110-119, January
2. Allen, J. B. (1977) "Cochlear micromechanics - A mechanism for transforming mechanical to neural tuning within the cochlea"; *J. Acoust. Soc. Am.*, **62** pp 930-939,

### Room acoustics

1. Allen, J. B. and Berkley, D. A. and Blauert, J. (1977) "A multimicrophone signal-processing technique to remove room reverberation from speech signals"; *J. Acoust. Soc. Am.*, **62** (4) pp 912-915, October (**pdf**)
2. Koenig, A. H. and Allen, J. B. and Berkley, D. A. and Curtis, T. H. (1977) "Determination of masking-level differences in a reverberant environment"; *J. Acoust. Soc. Am.*, **61** pp 1374-1376, May

### STFT

1. Allen, J. B. (1977) "Short Time Spectral Analysis, Synthesis, and Modification by Discrete Fourier Transform"; *IEEE Trans. on Acoust.*

*Speech and Sig. Processing*, **25** pp 235-238, June (**pdf,erata**)

2. Allen, J. B. and Rabiner, L. R. (1977) "A unified approach to short-time Fourier analysis and synthesis"; *Proc. IEEE*, **65** (11) pp 1558-1564, November (**pdf**)

## 1976

### Musical acoustics

1. Allen, Jont B. (1976) "On the aging of steel guitar strings"; *Catgut Acoustical Society Newsletter*, Nov., Vol 26, pp 27-29, (**pdf**)

## 1974

### Communication Theory: Channel equalization

1. Allen, J. B. and Mazo, J. E. (1974) "A decision-free equalization scheme for minimum phase channels"; *IEEE Trans. on Comm.*, **COM-22** (10) pp 1732--1733, October

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