

## PUBLICATIONS – Christopher J. Struck

C. J. Struck, “*Measurement Uncertainty and its Application to Standards in Acoustics*”, to be presented at the Acoustical Society of America 174<sup>th</sup> Meeting (*INVITED*) in New Orleans, LA (4-8 December 2017).

C. J. Struck, “*An overview of ANSI/ASA S3.7-2016: Method for Measurement and Calibration of Earphones*”, to be presented at the Acoustical Society of America 174<sup>th</sup> Meeting (*INVITED*) in New Orleans, LA (4-8 December 2017).

C. J. Struck, “*Why Is Headphone Audio So Poor, and What Can Be Done About It?*”, Keynote address and paper, to be presented at the 6<sup>th</sup> International Symposium on Electroacoustic Technologies, Shenzhen, China, (4-5 November 2017).

C. J. Struck, “*Loudspeaker Design – Master Class*”, to be presented at the 6<sup>th</sup> International Symposium on Electroacoustic Technologies, Shenzhen, China, (4-5 November 2017).

C. J. Struck, “*Standards Program of the Acoustical Society of America*”, *Acoustics Today*, Vol. 13, Issue 3, Fall 2017.

IEC TS 60318-7:2017: “*Electroacoustics – Simulators of human head and ear - Part 7: Head and torso simulator for the measurement of air-conduction hearing aids*”, C. J. Struck, Working Group 21 Member.

C. J. Struck and L. Prusick, “*Comparison of Real-World Bandwidth in Hearing Aids vs. Earlens Light-Driven Hearing Aid System*”, *Hearing Review*, Vol. 24, No. 3, pp. 24-29, 2017.

C. J. Struck, “*A, B, & C Weighting and Their Relationship to the Equal Loudness Contours*”, *Voice Coil*, Vol. 30, No. 5 (2017 March).

IEC 61094-5:2016: “*Electroacoustics - Measurement microphones - Part 5: Methods for pressure calibration of working standard microphones by comparison*”, C. J. Struck, Working Group 5 Member.

IEC 61094-3:2016: “*Electroacoustics - Measurement microphones - Part 3: Primary method for free-field calibration of laboratory standard microphones by the reciprocity technique*”, C. J. Struck, Working Group 5 Member.

IEC TS 62886:2016: “*Electroacoustics - Hearing aids - Method for measuring electroacoustic performance up to 16 kHz*”, C. J. Struck, Working Group 13 Member.

C. J. Struck, “*Refinements in the Electroacoustic Testing of Headphones*”, proceedings of the Audio Engineering Society International Conference on Headphone Technology – Aalborg, Denmark (2016 August 24–26).

C. J. Struck, “*Opportunities for International Liaison: Acoustical Noise Standards for the New Millennium*”, *InterNoise 2016* – Hamburg, Germany (2016 August 21-24).

ANSI/ASA S3.7-2016, “*American National Standard – Method for Measurement and Calibration of Earphones*”, C. J. Struck, Working Group S3WG37 Chair.

IEEE 1652-2016, “*Standard for Translating Head and Torso Simulator Measurements from Eardrum to Other Acoustic Reference Points*”, C. J. Struck, IEEE Working Group on Communications Electroacoustics Member.

ANSI/ASA S1.6-2016, “*American National Standard – Preferred Frequencies and Filter Band Center Frequencies for Acoustical Measurements*”, C. J. Struck, Working Group S1WG29 Member.

C. J. Struck, “*Boundary Effects on Sources at Low Frequencies*”, *Voice Coil*, Vol. 29, No. 9 (2016 July).

C. J. Struck, “*Hearing Instruments: Innovation, Challenges, and Standards*” (*INVITED*), presented at the FDA Public Workshop - Streamlining Good Manufacturing Practices for Hearing Aids (21 April 2016).

IEC 60118-0:2015: “*Electroacoustics - Hearing aids - Part 0: Measurement of the performance characteristics of hearing aids*”, C. J. Struck, Working Group 13 Member.

ANSI/ASA S3.20-2015, “*American National Standard – Bioacoustical Terminology*”, C. J. Struck, Working Group S3WG73 Chair.

C. J. Struck and S. F. Temme, “*Headphone Response: Target Equalization Trade-offs and Limitations*”, presented at the Audio Engineering Society 139<sup>th</sup> Convention – New York, NY (2015 October 29 – November 1).

C. J. Struck, “*An Overview of the ANSI/ASA Standards Program*”, InterNoise 2015 – San Francisco, CA (2015 August 9-12). Reprinted in Sound & Vibration – 2015 December.

ANSI/ASA S3.22-2014, “American National Standard – Specification of Hearing Aid Characteristics”, C. J. Struck, Working Group S3WG48 Member.

C. J. Struck, “*Free Plus Diffuse Sound Field Target Earphone Response Derived From Classical Room Acoustics Theory*”, presented at the Audio Engineering Society 135<sup>th</sup> Convention – New York, NY (2013 October 17-20).

C. J. Struck, “*Calibrating for Loudspeaker Impedance Measurements*”, The 2013 Loudspeaker Industry Sourcebook, Segment LLC, publishers of Voice Coil, (2013 July 15).

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C. J. Struck, “*ZFIT: A MATLAB Tool for Thiele-Small Parameter Fitting and Optimization*”, presented at the Audio Engineering Society 129<sup>th</sup> Convention – San Francisco, CA (2010 November 4-7).

ANSI/ASA S3.35-2010, “American National Standard – Method of Measurement of Performance Characteristics of Hearing Aids Under Simulated Real-Ear Working Conditions”, C. J. Struck, Working Group S3WG48 Member.

IEEE 269-2010, “Standard Methods for Measuring Transmission Performance of Analog and Digital Telephone Sets, Handsets, and Headsets”, C. J. Struck, IEEE Subcommittee on Telecommunications Instrument Testing Member.

IEEE 1329-2010, “Standard for Measuring Transmission Performance of Speakerphones”, C. J. Struck, IEEE Subcommittee on Telecommunications Instrument Testing Member.

ANSI/ASA S3.25-2009, “American National Standard for an Occluded Ear Simulator”, C. J. Struck, Working Group S3WG37 Chair.

C. J. Struck, D. Foley, “*Ensuring Accurate Playback And Analysis Of Binaural Recordings For Automotive Systems*”, presented at the Audio Engineering Society 36<sup>th</sup> International Conference – Dearborn, MI (2009 June 2-4).

C. J. Struck, K. Thorborg, A. Unruh, “*An Improved Electrical Equivalent Circuit Model for Dynamic Moving Coil Transducers*”, presented at the Audio Engineering Society 122<sup>nd</sup> Convention – Vienna (2007 May 5-8).

C. J. Struck, R. Little, A. Unruh, A. Jabbari, and J. P. Axelsson “*An Extended Small Signal Parameter Loudspeaker Model for the Linear Array Transducer*”, presented at the Audio Engineering Society 121<sup>st</sup> Convention – San Francisco, CA (2006 October 5-8).

C. J. Struck, A. Unruh, “*Linear Array Transducer Technology*”, presented at the Audio Engineering Society 121<sup>st</sup> Convention – San Francisco, CA (2006 October 5-8).

C. J. Struck, “*An Artificial Diffuse Field For In-Situ Microphone Measurements*” (*INVITED*), presented at the NOISECON/Acoustical Society of America 150<sup>th</sup> Meeting – Minneapolis, MN (2005 October 17-21).

C. J. Struck, C. Chabanne, N. Saint-Arnaud, “*A New Low-Latency, Discrete Multichannel Virtualization Technique*”, presented at the Audio Engineering Society 24<sup>th</sup> International Conference – Banff, Canada (2003 June 26-28).

C. J. Struck, L. Olson, and H. Müsch, “*Digital Solutions For Feedback Control*”, The Hearing Review, Vol. 8, No. 5, 2001 May.

C. J. Struck, “*Simulated Diffuse Field Measurements*”, presented at the Audio Engineering Society 107<sup>th</sup> Convention – New York, NY (1999 September 26-29).

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C. J. Struck and B.W. Edwards, "*Device Characterization Techniques for Digital Hearing Aids*", presented at the 3<sup>rd</sup> Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan – Honolulu, (1996 December 2-6).

C. J. Struck, Z. Hou, and C.V. Pavlovic, "*A Prescription for Non-linear Hearing Aids Using Speech Intelligibility and Loudness Models*", presented at the 3<sup>rd</sup> Joint Meeting of the ASA and the Acoustical Society of Japan - Honolulu, (1996 December 2-6).

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C. J. Struck, D. R. Schwind, and A. P. Nash, "*The Early Sound Field In Performance Halls*", presented at the Audio Engineering Society 99<sup>th</sup> Convention - New York, (1995 October 6-9).

C. J. Struck and S. F. Temme, "*Simulated Free Field Measurements*", Journal of the Audio Engineering Society, Vol. 42, No. 6, 1994 June.

C. J. Struck, "*Electroacoustic Measurements on Telephones*", Brüel & Kjær Lecture Note, (1993 December).

C. J. Struck and S. F. Temme, "*A Comparison of Techniques for Evaluation of Loudspeakers at Low Frequencies*", presented at the Audio Engineering Society 95<sup>th</sup> Convention - New York, (1993 October 7-10).

C. J. Struck, "*Presentation and Interpretation of Loudspeaker Measurement Results*", presented at the Audio Engineering Society 94<sup>th</sup> Convention - Berlin, (1993 March 16-19).

C. J. Struck, "*Applications of Modern Sine-Based Measurement Algorithms in Electroacoustics*", presented at the NOBIM-NORSIG Conference - Lillehammer, Norway (1993 February 19-20).

C. J. Struck, "*An Adaptive Scan Algorithm for Fast Response Measurements*", presented at the Audio Engineering Society 91<sup>st</sup> Convention - New York, (1991 October 4-8).

C. J. Struck and C. H. Biering, "*A New Technique for Fast Response Measurements Using Linearly Swept Sine Excitation*", presented at the Audio Engineering Society 90<sup>th</sup> Convention - Paris, (1991 February 19-22).

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