

Bilag 1

Indholdsfortegnelse for Journal of the Acoustical Society of America (JASA)

CODEN: JASMAN

The Journal of the Acoustical Society of America

ISSN: 0001-4966

Vol. 118, No. 5

November 2005

ACOUSTICAL NEWS—USA		2741
USA Meeting Calendar		2743
ACOUSTICAL STANDARDS NEWS		2745
Standards Meetings Calendar		2745
BOOK REVIEWS		2753
REVIEWS OF ACOUSTICAL PATENTS		2757
LETTERS TO THE EDITOR		
Consonant identification in <i>N</i> -talker babble is a nonmonotonic function of <i>N</i> (L)	Sarah A. Simpson, Martin Cooke	2775
Measurements of tortuosity in stereolithographical bone replicas using audiofrequency pulses (L)	Keith Attenborough, Ho-Chul Shin, Qin Qin, Michael J. Fagan, Christian M. Langton	2779
Retrieving the Green's function in an open system by cross correlation: A comparison of approaches (L)	Kees Wapenaar, Jacob Fokkema, Roel Snieder	2783
On errors in estimating seabed scattering strength from long-range reverberation (L)	Charles Holland	2787
Subspace algorithms for noise reduction in cochlear implants (L)	Philipos C. Loizou, Arthur Lobo, Yi Hu	2791
Profile analysis: The effects of rove on sparse spectra (L)	Jennifer J. Lentz	2794
Phonation thresholds as a function of laryngeal size in a two-mass model of the vocal folds (L)	Jorge C. Lucero, Laura L. Koenig	2798
GENERAL LINEAR ACOUSTICS [20]		
A probability density function method for acoustic field uncertainty analysis	Kevin R. James, David R. Dowling	2802
Doubly focused backscattering from finite targets in an Airy caustic formed by a curved reflecting surface	Benjamin R. Dzikowicz, Philip L. Marston	2811
Acoustic scattering by a metallic tube with a concentric solid polymer cylinder coupled by a thin water layer. Influence of the thickness of the water layer on the two Scholte–Stoneley waves	Farid Chati, Fernand Léon, Gérard Maze	2820
Temporal analysis of tissue displacement induced by a transient ultrasound radiation force	Samuel Callé, Jean-Pierre Remenieras, Olivier Bou Matar, Melouka Elkateb Hachemi, Frédéric Patat	2829

(Continued)

SOUNDINGS

THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

VOL. 118, NO. 5, NOVEMBER 2005

CONTENTS—Continued from preceding page

Symmetric mode resonance of bubbles attached to a rigid boundary	Edward M. B. Payne, Suhith J. Illesinghe, Andrew Ooi, Richard Manasseh	2841
Dispersion anomalies of shear horizontal guided waves in two- and three-layered plates	V. I. Alshits, M. Deschamps, V. N. Lyubimov	2850
Plane wave propagation in generalized multiply connected acoustic filters	S. N. Panigrahi, M. L. Munjal	2860
Reflection of the s_0 Lamb mode from a flat bottom circular hole	O. Diligent, M. J. S. Lowe	2869
NONLINEAR ACOUSTICS [25]		
Two-dimensional axisymmetric numerical simulation of supercritical phase conjugation of ultrasound in active solid media	Olivier Bou Matar, Vladimir Preobrazhensky, Philippe Pernod	2880
AEROACOUSTICS, ATMOSPHERIC SOUND [28]		
Numerical simulation of finite amplitude wave propagation in air using a realistic atmospheric absorption model	Mark S. Wochner, Anthony A. Atchley, Victor W. Sparrow	2891
UNDERWATER SOUND [30]		
Ocean sound channel ray path perturbations from internal-wave shear and strain	Timothy F. Duda	2899
A new method for estimating shear-wave velocity in marine sediments from radiation impedance measurements	Masao Kimura	2904
Performance and limitations of spectral factorization for ambient noise sub-bottom profiling	Chris H. Harrison	2913
Source localization in the Haro Strait primer experiment using arrival time estimation and linearization	Zoi-Heleni Michalopoulou, Xiaoqun Ma	2924
Ray-theoretic localization of an impulsive source in a stratified ocean using two hydrophones	E. K. Skarsoulis, M. A. Kalogerakis	2934
Localization of multiple acoustic sources in the shallow ocean	Tracianne B. Neilsen	2944
Reverberation effects in acoustical resonators used for bubble measurements	David M. Farmer, Svein Vagle, Donald Booth	2954
Acoustic signals of underwater explosions near surfaces	John R. Krieger, Georges L. Chahine	2961
ULTRASONICS, QUANTUM ACOUSTICS, AND PHYSICAL EFFECTS OF SOUND [35]		
On three-dimensional edge waves in semi-infinite isotropic plates subject to mixed face boundary conditions	J. Kaplunov, D. A. Prikazchikov, G. A. Rogerson	2975
Transmission loss of viscoelastic materials containing oriented ellipsoidal coated microinclusions	Michael R. Haberman, Yves H. Berthelot, Mohammed Cherkaoui	2984
Computation of the temperature distortion in the stack of a standing-wave thermoacoustic refrigerator	David Marx, Philippe Blanc-Benon	2993
TRANSDUCTION [38]		
Micromachined microphones with diffraction-based optical displacement detection	Neal A. Hall, Baris Bicen, M. Kamran Jeelani, Wook Lee, Shakeel Qureshi, F. Levent Degertekin, Murat Okandan	3000
STRUCTURAL ACOUSTICS AND VIBRATION [40]		
Coupling of flexural and longitudinal wave motion in a periodic structure with asymmetrically arranged transverse beams	Lars Friis, Mogens Ohlrich	3010
Time-resolved modal decomposition based on the Linear Prediction Method—Applied for crack detection	István A. Veres, Dieter M. Profunser	3021

(Continued)

CONTENTS—Continued from preceding page

Energy sinks: Vibration absorption by an optimal set of undamped oscillators	I. Murat Koç, Antonio Carcaterra, Zhaoshun Xu, Adnan Akay	3031
Experiments on vibration absorption using energy sinks	Adnan Akay, Zhaoshun Xu, Antonio Carcaterra, I. Murat Koç	3043
An experimental investigation of two active segmented partition arrays	Timothy W. Leishman, Jiri Tichy	3050
The ensemble statistics of the vibrational energy density of a random system subjected to single point harmonic excitation	R. S. Langley, V. Cotroni	3064
NOISE: ITS EFFECTS AND CONTROL [50]		
Effect of flow on the drumlike silencer	Y. S. Choy, Lixi Huang	3077
Optimal virtual sensing for active noise control in a rigid-walled acoustic duct	Dick Petersen, Anthony C. Zander, Ben S. Cazzolato, Colin H. Hansen	3086
ARCHITECTURAL ACOUSTICS [55]		
Sound-field analysis by plane-wave decomposition using spherical microphone array	Munhum Park, Boaz Rafaely	3094
APPLIED ACOUSTICS PAPER: ARCHITECTURAL ACOUSTICS		
Flat-walled multilayered anechoic linings: Optimization and application	Jingfeng Xu, Jörg M. Buchholz, Fergus R. Fricke	3104
ACOUSTICAL MEASUREMENTS AND INSTRUMENTATION [58]		
Technique for the calibration of hydrophones in the frequency range 10 to 600 kHz using a heterodyne interferometer and an acoustically compliant membrane	Pete D. Theobald, Stephen P. Robinson, Alex D. Thompson, Roy C. Preston, Paul A. Lepper, Wang Yuebing	3110
ACOUSTIC SIGNAL PROCESSING [60]		
Source localization in the presence of internal waves	Ralph N. Baer, Michael D. Collins	3117
Development of a multiview time-domain imaging algorithm with a Fermat correction	Karl A. Fisher, Sean K. Lehman, Dave H. Chambers	3122
Time-reversal-based imaging and inverse scattering of multiply scattering point targets	Anthony J. Devaney, Edwin A. Marengo, Fred K. Gruber	3129
Near field acoustic holography with particle velocity transducers	Finn Jacobsen, Yang Liu	3139
Reflection and time-reversal of ultrasonic waves in the vicinity of the Rayleigh angle at a fluid-solid interface	François Vignon, Fabrice Marquet, Didier Cassereau, Mathias Fink, Jean-François Aubry, Pierre Guedard	3145
PHYSIOLOGICAL ACOUSTICS [64]		
Underwater temporary threshold shift in pinnipeds: Effects of noise level and duration	David Kastak, Brandon L. Southall, Ronald J. Schusterman, Colleen Reichmuth Kastak	3154
PSYCHOLOGICAL ACOUSTICS [66]		
Informational masking of speech in children: Effects of ipsilateral and contralateral distracters	Frederic L. Wightman, Doris J. Kistler	3164
The interaction of glottal-pulse rate and vocal-tract length in judgements of speaker size, sex, and age	David R. R. Smith, Roy D. Patterson	3177
Listening experience with iterated rippled noise alters the perception of 'pitch' strength of complex sounds in the chinchilla	William P. Shofner, William M. Whitmer, William A. Yost	3187

(Continued)

SOUNDINGS

THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

VOL. 118, NO. 5, NOVEMBER 2005

CONTENTS—Continued from preceding page

Forward masking of amplitude modulation: Basic characteristics	Magdalena Wojtczak, Neal F. Viemeister	3198
The temporal effect in listeners with mild to moderate cochlear hearing impairment	Elizabeth A. Strickland, Lata A. Krishnan	3211
Comparing monaural and interaural temporal windows: Effects of a temporal fringe on sensitivity to intensity differences	Mark A. Stellmack, Neal F. Viemeister, Andrew J. Byrne	3218
The effect of diotic and dichotic level-randomization on the binaural masking-level difference	G. Bruce Henning, Virginia M. Richards, Jennifer J. Lentz	3229
Precedence-based speech segregation in a virtual auditory environment	Douglas S. Brungart, Brian D. Simpson, Richard L. Freyman	3241
SPEECH PERCEPTION [71]		
Thresholds for second formant transitions in front vowels	Diane Kewley-Port, Shawn S. Goodman	3252
Intelligibilities of 1-octave rectangular bands spanning the speech spectrum when heard separately and paired	Richard M. Warren, James A. Bashford, Jr., Peter W. Lenz	3261
Phonetic training with acoustic cue manipulations: A comparison of methods for teaching English /r/-/l/ to Japanese adults	Paul Iverson, Valerie Hazan, Kerry Bannister	3267
SPEECH PROCESSING AND COMMUNICATION SYSTEMS [72]		
Effects and modeling of phonetic and acoustic confusions in accented speech	Pascale Fung, Yi Liu	3279
MUSIC AND MUSICAL INSTRUMENTS [75]		
An analytical prediction of the oscillation and extinction thresholds of a clarinet	Jean-Pierre Dalmont, Joël Gilbert, Jean Kergomard, Sébastien Ollivier	3294
How do clarinet players adjust the resonances of their vocal tracts for different playing effects?	Claudia Fritz, Joe Wolfe	3306
Conservative numerical methods for nonlinear strings	Stefan Bilbao	3316
BIOACOUSTICS [80]		
High intensity focused ultrasound-induced gene activation in sublethally injured tumor cells <i>in vitro</i>	Yunbo Liu, Takashi Kon, Chuanyuan Li, Pei Zhong	3328
Off-axis effects on the multipulse structure of sperm whale usual clicks with implications for sound production	Walter M. X. Zimmer, Peter T. Madsen, Valeria Teloni, Mark P. Johnson, Peter L. Tyack	3337
Source of the North Pacific "boing" sound attributed to minke whales	Shannon Rankin, Jay Barlow	3346
Target representation of naturalistic echolocation sequences in single unit responses from the inferior colliculus of big brown bats	Mark I. Sanderson, James A. Simmons	3352
ERRATA		
Erratum: "The energy method for analyzing the piezoelectric electroacoustic transducers" [J. Acoust. Soc. Am. 117(1), 210–220 (2005)]	Boris Aronov	3362
Erratum: "The effect of cross-channel synchrony on the perception of temporal regularity" [J. Acoust. Soc. Am. 118(2), 946–954 (2005)]	Katrin Krumbholz, Stefan Bleeck, Roy D. Patterson, Maria Senokozlieva, Annemarie Seither-Preisler, Bernd Lütkenhöner	3363
CUMULATIVE AUTHOR INDEX		3364

CODEN: JASMAN

The Journal of the Acoustical Society of America

ISSN: 0001-4966

Vol. 118, No. 6

December 2005

ACOUSTICAL NEWS—USA	3371
USA Meetings Calendar	3372
ACOUSTICAL NEWS—INTERNATIONAL	3373
International Meetings Calendar	3373
BOOK REVIEWS	3375
OBITUARIES	3377
REVIEWS OF ACOUSTICAL PATENTS	3379
ABSTRACTS FROM ACOUSTICS RESEARCH LETTERS ONLINE	3393

LETTERS TO THE EDITOR

Equivalence of expressions for the acoustic radiation force on cylinders (L)	Wei Wei, Philip L. Marston	3397
Stiffness matrix method with improved efficiency for elastic wave propagation in layered anisotropic media (L)	Eng Leong Tan	3400
Click production during breathing in a sperm whale (<i>Physeter macrocephalus</i>) (L)	Magnus Wahlberg, Alexandros Frantzis, Paraskevi Alexiadou, Peter T. Madsen, Bertel Møhl	3404

GENERAL LINEAR ACOUSTICS [20]

Time-domain calculation of acoustical wave propagation in discontinuous media using acoustical wave propagator with mapped pseudospectral method	Jing Lu, Jie Pan, Boling Xu	3408
Sound propagation through and scattering by internal gravity waves in a stably stratified atmosphere	Vladimir E. Ostashev, Igor P. Chunchuzov, D. Keith Wilson	3420
Debye-series analysis of the transmission coefficient of a water-saturated porous plate obeying Biot's theory	Serge Derible	3430
Approximate boundary conditions for a fluid-loaded elastic plate	M. Johansson, P. D. Folkow, A. M. Hägglund, P. Olsson	3436
The mean and variance of diffuse field correlations in finite bodies	Richard L. Weaver, Oleg I. Lobkis	3447
Simplified expansions for radiation from a baffled circular piston	T. Douglas Mast, Feng Yu	3457
Measuring the phase of vibration of spheres in a viscoelastic medium as an image contrast modality	Matthew W. Urban, Randall R. Kinnick, James F. Greenleaf	3465
On the holographic reconstruction of vibroacoustic fields using equivalent sources and inverse boundary element method	In-Youl Jeon, Jeong-Guon Ih	3473

(Continued)

SOUNDINGS

THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

VOL. 118, NO. 6, DECEMBER 2005

CONTENTS—Continued from preceding page

Measurements of the frame acoustic properties of porous and granular materials	Junhong Park	3483
NONLINEAR ACOUSTICS [25]		
Two-dimensional numerical simulation of acoustic wave phase conjugation in magnetostrictive elastic media	Peter Voinovich, Alain Merlen	3491
A model for large amplitude oscillations of coated bubbles accounting for buckling and rupture	Philippe Marmottant, Sander van der Meer, Marcia Emmer, Michel Versluis, Nico de Jong, Sascha Hilgenfeldt, Detlef Lohse	3499
AEROACOUSTICS, ATMOSPHERIC SOUND [28]		
Effect of a downstream ventilated gas cavity on turbulent boundary layer wall pressure fluctuation spectra	Steven D. Young, Timothy A. Brungart, Gerald C. Lauchle, Michael S. Howe	3506
UNDERWATER SOUND [30]		
Effect of wind-generated bubbles on fixed range acoustic attenuation in shallow water at 1–4 kHz	Michael A. Ainslie	3513
Emergence rate of the time-domain Green's function from the ambient noise cross-correlation function	Karim G. Sabra, Philippe Roux, W. A. Kuperman	3524
Mean and covariance of the forward field propagated through a stratified ocean waveguide with three-dimensional random inhomogeneities	Purnima Ratilal, Nicholas C. Makris	3532
Mean and variance of the forward field propagated through three-dimensional random internal waves in a continental-shelf waveguide	Tianrun Chen, Purnima Ratilal, Nicholas C. Makris	3560
Three-dimensional passive acoustic tracking of sperm whales (<i>Physeter macrocephalus</i>) in ray-refracting environments	Aaron Thode	3575
ULTRASONICS, QUANTUM ACOUSTICS, AND PHYSICAL EFFECTS OF SOUND [35]		
Analysis of the near-field ultrasonic scattering at a surface crack	Bernard Masserey, Edoardo Mazza	3585
A model for the dynamics of gas bubbles in soft tissue	Xinmai Yang, Charles C. Church	3595
STRUCTURAL ACOUSTICS AND VIBRATION [40]		
Coupled flexural-longitudinal wave motion in a finite periodic structure with asymmetrically arranged transverse beams	Lars Friis, Mogens Ohlrich	3607
Structural vibrations of buried land mines	Andrei Zagrai, Dimitri Donskoy, Alexander Ekimov	3619
NOISE: ITS EFFECTS AND CONTROL [50]		
Noise levels in Johns Hopkins Hospital	Ilene J. Busch-Vishniac, James E. West, Colin Barnhill, Tyrone Hunter, Douglas Orellana, Ram Chivukula	3629
Underwater and in-air sounds from a small hovercraft	Susanna B. Blackwell, Charles R. Greene, Jr.	3646
ARCHITECTURAL ACOUSTICS [55]		
Optimal active noise control in large rooms using a "locally global" control strategy	Desheng Li, Murray Hodgson	3653
Acoustic eigenvalues of rectangular rooms with arbitrary wall impedances using the interval Newton/generalized bisection method	Yusuke Naka, Assad A. Oberai, Barbara G. Shinn-Cunningham	3662

(Continued)

CONTENTS—Continued from preceding page

Dynamic measurements of the elastic constants of glass wool	Viggo Tarnow	3672
The development of a Component Mode Synthesis (CMS) model for three-dimensional fluid-structure interaction	M. D. C. Magalhaes, N. S. Ferguson	3679
ACOUSTICAL MEASUREMENTS AND INSTRUMENTATION [58]		
A three-dimensional sound intensity measurement system for sound source identification and sound power determination by In models	Shiho Nagata, Kenji Furihata, Tomohiro Wada, David K. Asano, Takesaburo Yanagisawa	3691
ACOUSTIC SIGNAL PROCESSING [60]		
An improved acoustic microimaging technique with learning overcomplete representation	Guang-Ming Zhang, David M. Harvey, Derek R. Braden	3706
Patch near-field acoustical holography in cylindrical geometry	Moohyung Lee, J. Stuart Bolton	3721
Focused nonlinear phase-conjugate waves generated by a solid parametric amplifier	Andrew P. Brysev, Fedor V. Bunkin, Leonid M. Krutyansky, Xiang Yan, Mark F. Hamilton	3733
PHYSIOLOGICAL ACOUSTICS [64]		
Effect of voltage-dependent membrane properties on active force generation in cochlear outer hair cell	Zhijie Liao, Aleksander S. Popel, William E. Brownell, Alexander A. Spector	3737
Evidence for a bipolar change in distortion product otoacoustic emissions during contralateral acoustic stimulation in humans	Jörg Müller, Thomas Janssen, Guido Heppelmann, Wolfgang Wagner	3747
PSYCHOLOGICAL ACOUSTICS [66]		
Perception of the envelope-beat frequency of inharmonic complex temporal envelopes	Christian Füllgrabe, Christian Lorenzi	3757
Spatial unmasking of birdsong in human listeners: Energetic and informational factors	Virginia Best, Erol Ozmeral, Frederick J. Gallun, Kamal Sen, Barbara G. Shinn-Cunningham	3766
Detection of spectrally complex signals in comodulated maskers: Effect of temporal fringe	John H. Grose, Joseph W. Hall, III, Emily Buss, Debora R. Hatch	3774
Reduced contribution of a nonsimultaneous mistuned harmonic to residue pitch	Hedwig Gockel, Christopher J. Plack, Robert P. Carlyon	3783
A perceptual learning investigation of the pitch elicited by amplitude-modulated noise	Matthew B. Fitzgerald, Beverly A. Wright	3794
The advantage of knowing where to listen	Gerald Kidd, Jr., Tanya L. Arbogast, Christine R. Mason, Frederick J. Gallun	3804
Discrimination of speaker size from syllable phrases	D. Timothy Ives, David R. R. Smith, Roy D. Patterson	3816
Psychophysical estimates of nonlinear cochlear processing in younger and older listeners	René H. Gifford, Sid P. Bacon	3823
SPEECH PRODUCTION [70]		
Synergistic modes of vocal tract articulation for American English vowels	Brad H. Story	3834
Interacting effects of syllable and phrase position on consonant articulation	Dani Byrd, Sungbok Lee, Daylen Riggs, Jason Adams	3860

(Continued)

SOUNDINGS

THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

VOL. 118, NO. 6, DECEMBER 2005

CONTENTS—Continued from preceding page

SPEECH PERCEPTION [71]

- | | | |
|--|---------------------------------------|------|
| The influence of noise on vowel and consonant cues | Gaurang Parikh, Philipos C. Loizou | 3874 |
| Interference from audio distracters during speechreading | Douglas S. Brungart, Brian D. Simpson | 3889 |

MUSIC AND MUSICAL INSTRUMENTS [75]

- | | | |
|---|--|------|
| Self-to-other ratios measured in an opera chorus in performance | Sten Ternström, Densil Cabrera, Pamela Davis | 3903 |
|---|--|------|

BIOACOUSTICS [80]

- | | | |
|---|--|------|
| Kramers-Kronig analysis of attenuation and dispersion in trabecular bone | Kendall R. Waters, Brent K. Hoffmeister | 3912 |
| Localization of aerial pure tones by pinnipeds | Marla M. Holt, Ronald J. Schusterman, David Kastak, Brandon L. Southall | 3921 |
| Doppler-shift compensation in the Taiwanese leaf-nosed bat (<i>Hipposideros terasensis</i>) recorded with a telemetry microphone system during flight | Shizuko Hiryu, Koji Katsura, Liang-Kong Lin, Hiroshi Riquimaroux, Yoshiaki Watanabe | 3927 |
| Origin of the double- and multi-pulse structure of echolocation signals in Yangtze finless porpoise (<i>Neophocaena phocaenoides asiaeorientalis</i>) | Songhai Li, Kexiong Wang, Ding Wang, Tomonari Akamatsu | 3934 |
| Sei whale sounds recorded in the Antarctic | Mark A. McDonald, John A. Hildebrand, Sean M. Wiggins, Deborah Thiele, Deb Glasgow, Sue E. Moore | 3941 |
| Nonlinear resonant ultrasound spectroscopy (NRUS) applied to damage assessment in bone | Marie Muller, Alexander Sutin, Robert Guyer, Maryline Talmant, Pascal Laugier, Paul A. Johnson | 3946 |
| Superresolution ultrasound imaging using back-projected reconstruction | G. T. Clement, J. Huttunen, K. Hynynen | 3953 |

ERRATA

- | | | |
|--|--|------|
| Erratum: "The acoustical Klein-Gordon equation: The wave-mechanical step and a barrier potential functions" [J. Acoust. Soc. Am. 114(3), 1291–1302 (2003)] | Barbara J. Forbes, E. Roy Pike, David B. Sharp | 3961 |
| Erratum: 4pAB4. Strategies for weighting exposure in the development of acoustic criteria for marine mammals [J. Acoust. Soc. Am. 118(3), 2019 (2005)] | James H. Miller, Anne E. Bowles, Brandon L. Southall, Roger L. Gentry, William T. Ellison, James J. Finneran, Charles R. Greene Jr., David Kastak, Darlene R. Ketten, Peter L. Tyack, Paul E. Nachtigall, W. John Richardson, Jeanette A. Thomas | 3962 |

INDEX TO VOLUME 118

- | | |
|-----------------------------|------|
| How To Use This Index | 3963 |
| Classification of Subjects | 3963 |
| Subject Index To Volume 118 | 3968 |
| Author Index To Volume 118 | 4018 |

CODEN: JASMAN

The Journal of the Acoustical Society of America

ISSN: 0001-4966

Vol. 119, No. 1

January 2006

ACOUSTICAL NEWS-USA		1
USA Meeting Calendar		3
ACOUSTICAL STANDARDS NEWS		5
Standards Meetings Calendar		6
BOOK REVIEWS		13
REVIEWS OF ACOUSTICAL PATENTS		15
LETTERS TO THE EDITOR		
Alternate proof of the optical theorem for impenetrable targets (L)	G. A. Kriegsmann	31
A study of the influence of mounting conditions on the measured sound absorption in laboratory tests of suspended ceilings (L)	Marcelo de Godoy, Peter J. Barry, Sylvio R. Bistafa	33
Discrimination of depth of sinusoidal amplitude modulation with and without roved carrier levels (L)	Mark A. Stellmack, Neal F. Viemeister, Andrew J. Byrne	37
Measuring the acoustic effects of compression amplification on speech in noise (L)	Pamela E. Souza, Lorient M. Jenstad, Kumiko T. Boike	41
GENERAL LINEAR ACOUSTICS [20]		
Hybrid compliance-stiffness matrix method for stable analysis of elastic wave propagation in multilayered anisotropic media	Eng Leong Tan	45
A large ultrasonic bounded acoustic pulse transducer for acoustic transmission goniometry: Modeling and calibration	Youcef Bouzidi, Douglas R. Schmitt	54
Inverse potential scattering in duct acoustics	Barbara J. Forbes, E. Roy Pike, David B. Sharp, Tuncay Aktosun	65
NONLINEAR ACOUSTICS [25]		
An ultrasonic method for dynamic monitoring of fatigue crack initiation and growth	Bao Mi, Jennifer E. Michaels, Thomas E. Michaels	74
AEROACOUSTICS, ATMOSPHERIC SOUND [28]		
The near-ground structure of the nocturnal sound field	Roger Waxler, Carrick L. Talmadge, Shantharam Dravida, Kenneth E. Gilbert	86
Singular meshless method using double layer potentials for exterior acoustics	D. L. Young, K. H. Chen, C. W. Lee	96
High frequency formulation for the acoustic power spectrum due to cascade-turbulence interaction	Cheolung Cheong, Phillip Joseph, Soogab Lee	108

(Continued)

UNDERWATER SOUND [30]

On the acoustic field in a Pekeris waveguide with attenuation in the bottom half-space	Michael J. Buckingham, Eric M. Giddens	123
Broadband modeling of downslope propagation in a penetrable wedge	T. W. Yudichak, G. S. Royal, D. P. Knobles, M. Gray, R. A. Koch, S. A. Stotts	143
A reflected energy prediction model for long-range hydroacoustic reflection in the oceans	Zachary M. Upton, Jay J. Pulli, Brian Myhre, David Blau	153
Stepwise coupled mode scattering of ambient noise by a cylindrically symmetric seamount	Richard B. Evans	161
Ocean acoustic hurricane classification	Joshua D. Wilson, Nicholas C. Makris	168
Sounds from an oil production island in the Beaufort Sea in summer: Characteristics and contribution of vessels	Susanna B. Blackwell, Charles R. Greene, Jr.	182
Uncertainty analysis in matched-field geoacoustic inversions	Chen-Fen Huang, Peter Gerstoft, William S. Hodgkiss	197
Data error covariance in matched-field geoacoustic inversion	Stan E. Dosso, Peter L. Nielsen, Michael J. Wilmut	208
Validity of the Markov approximation in ocean acoustics	Frank S. Henyey, Terry E. Ewart	220
Improved parametrization of Antarctic krill target strength models	Gareth L. Lawson, Peter H. Wiebe, Carin J. Ashjian, Dezhong Chu, Timothy K. Stanton	232

ULTRASONICS, QUANTUM ACOUSTICS, AND PHYSICAL EFFECTS OF SOUND [35]

Acoustic waves generated by a laser point pulse in a transversely isotropic cylinder	Y. Pan, M. Perton, B. Audoin, C. Rossignol	243
--	--	-----

TRANSDUCTION [38]

Pressure-sensitive paint as a distributed optical microphone array	James W. Gregory, John P. Sullivan, Sameh S. Wanis, Narayanan M. Komerath	251
--	---	-----

STRUCTURAL ACOUSTICS AND VIBRATION [40]

Decentralized harmonic active vibration control of a flexible plate using piezoelectric actuator-sensor pairs	Matthieu Baudry, Philippe Micheau, Alain Berry	262
---	--	-----

NOISE: ITS EFFECTS AND CONTROL [50]

Effects of porous covering on sound attenuation by periodic arrays of cylinders	Olga Umnova, Keith Attenborough, Chris M. Linton	278
Wave reflection and transmission reduction using a piezoelectric semipassive nonlinear technique	D. Guyomar, A. Faiz, L. Petit, C. Richard	285

ARCHITECTURAL ACOUSTICS [55]

Subjective assessment of listening environments in university classrooms: Perceptions of students	Susan M. Kennedy, Murray Hodgson, Lisa Dillon Edgett, Noelle Lamb, Rod Rempel	299
Ternary and quadriphase sequence diffusers	Trevor J. Cox, James A. S. Angus, Peter D'Antonio	310

(Continued)

ACOUSTICAL MEASUREMENTS AND INSTRUMENTATION [58]

- | | | |
|---|---|-----|
| Calibration of the pressure sensitivity of microphones by a free-field method at frequencies up to 80 kHz | Allan J. Zuckerwar, G. C. Herring,
Brian R. Elbing | 320 |
|---|---|-----|

ACOUSTIC SIGNAL PROCESSING [60]

- | | | |
|---|---|-----|
| A specialized fast cross-correlation for acoustical measurements using coded sequences | John N. Daigle, Ning Xiang | 330 |
| The array invariant | Sunwoong Lee, Nicholas C. Makris | 336 |
| A miniaturized adaptive microphone array under directional constraint utilizing aggregated microphones | Mitsuharu Matsumoto, Shuji Hashimoto | 352 |
| Algorithms for computing the time-corrected instantaneous frequency (reassigned) spectrogram, with applications | Sean A. Fulop, Kelly Fitz | 360 |
| Transducer sensitivity compensation using diagonal preconditioning for time reversal and Tikhonov inverse filtering in acoustic systems | Pierre M. Dumuid, Ben S. Cazzolato, Anthony C. Zander | 372 |
| Scan-based near-field acoustical holography and partial field decomposition in the presence of noise and source level variation | Moohyung Lee, J. Stuart Bolton | 382 |

PHYSIOLOGICAL ACOUSTICS [64]

- | | | |
|---|--|-----|
| A hydromechanical biomimetic cochlea: Experiments and models | Fangyi Chen, Howard I. Cohen,
Thomas G. Bifano, Jason Castle,
Jeffrey Fortin, Christopher
Kapusta, David C. Mountain,
Aleks Zosuls, Allyn E. Hubbard | 394 |
| Auditory-nerve first-spike latency and auditory absolute threshold: A computer model | Ray Meddis | 406 |
| Influence of primary-level and primary-frequency ratios on human distortion product otoacoustic emissions | Tiffany A. Johnson, Stephen T.
Neely, Cassie A. Garner, Michael
P. Gorga | 418 |
| Signal-to-noise ratio and frequency analysis of continuous loop averaging deconvolution (CLAD) of overlapping evoked potentials | Özcan Özdamar, Jorge Bohórquez | 429 |
| Audition in sciaenid fishes with different swim bladder-inner ear configurations | John U. Ramcharitar, Dennis M.
Higgs, Arthur N. Popper | 439 |

PSYCHOLOGICAL ACOUSTICS [66]

- | | | |
|--|--|-----|
| Level dependence of auditory filters in nonsimultaneous masking as a function of frequency | Andrew J. Oxenham, Andrea M.
Simonson | 444 |
| Auditory filter nonlinearity across frequency using simultaneous notched-noise masking | Richard J. Baker, Stuart Rosen | 454 |
| Sound source localization in real sound fields based on empirical statistics of interaural parameters | Johannes Nix, Volker Hohmann | 463 |
| Frequency discrimination of complex tones; assessing the role of component resolvability and temporal fine structure | Brian C. J. Moore, Brian R.
Glasberg, Helen J. Flanagan, Joe
Adams | 480 |
| Factors affecting the use of noise-band vocoders as acoustic models for pitch perception in cochlear implants | Johan Laneau, Marc Moonen, Jan
Wouters | 491 |
| Perception of amplitude modulation by hearing-impaired listeners: The audibility of component modulation and detection of phase change in three-component modulators | Aleksander Sek, Brian C. J. Moore | 507 |
| Horizontal localization with bilateral hearing aids: Without is better than with | Tim Van den Bogaert, Thomas J.
Klasen, Marc Moonen, Lieselot Van
Deun, Jan Wouters | 515 |

(Continued)

CONTENTS—Continued from preceding page

Distortion product otoacoustic emission (DPOAE) in tinnitus patients	E. Ozimek, A. Wicher, W. Szyfter, E. Szymiec	527
SPEECH PRODUCTION [70]		
The effect of glottal angle on intraglottal pressure	Sheng Li, Ronald C. Scherer, MingXi Wan, SuPin Wang, HuiHui Wu	539
Testing the assumptions of linear prediction analysis in normal vowels	M. A. Little, P. E. McSharry, I. M. Moroz, S. J. Roberts	549
SPEECH PERCEPTION [71]		
Speech perception from monaural and binaural information	John F. Culling, Barrie A. Edmonds, Kathryn I. Hodder	559
Perceptual similarity of regional dialects of American English	Cynthia G. Clopper, Susannah V. Levi, David B. Pisoni	566
Differentiation of speech and nonspeech processing within primary auditory cortex	D. H. Whalen, Randall R. Benson, Matthew Richardson, Brook Swainson, Vincent P. Clark, Song Lai, W. Einar Mencl, Robert K. Fulbright, R. Todd Constable, Alvin M. Liberman	575
Perceived speech rate: The effects of articulation rate and speaking style in spontaneous speech	Jacques Koreman	582
First-language phonotactics in second-language listening	Andrea Weber, Anne Cutler	597
SPEECH PROCESSING AND COMMUNICATION SYSTEMS [72]		
Beamformer performance with acoustic vector sensors in air	Michael E. Lockwood, Douglas L. Jones	608
BIOACOUSTICS [80]		
Rainforests as concert halls for birds: Are reverberations improving sound transmission of long song elements?	Erwin Nemeth, Torben Dabelsteen, Simon Boel Pedersen, Hans Winkler	620
Vocal behavior of resident killer whale matriline with newborn calves: The role of family signatures	Brigitte M. Weiß, Friedrich Ladich, Paul Spong, Helena Symonds	627
Monaural and binaural hearing directivity in the bottlenose dolphin: Evoked-potential study	Vladimir V. Popov, Alexander Ya. Supin, Vladimir O. Klishin, Tatyana N. Bulgakova	636
Automated categorization of bioacoustic signals: Avoiding perceptual pitfalls	Volker B. Deecke, Vincent M. Janik	645
<i>In vitro</i> ultrasonic characterization of human cancellous femoral bone using transmission and backscatter measurements: Relationships to bone mineral density	F. Jenson, F. Padilla, V. Bousson, C. Bergot, J.-D. Laredo, P. Laugier	654
CUMULATIVE AUTHOR INDEX		664

CODEN: JASMAN

The Journal of the Acoustical Society of America

ISSN: 0001-4966

Vol. 119, No. 2

February 2006

ACOUSTICAL NEWS-USA		669
USA Meeting Calendar		674
ACOUSTICAL NEWS-INTERNATIONAL		677
International Meeting Calendar		677
REVIEWS OF ACOUSTICAL PATENTS		681
LETTERS TO THE EDITOR		
A numerically accurate and robust expression for bistatic scattering from a plane triangular facet (L)	Gorm Wendelboe, Finn Jacobsen, Judith M. Bell	701
Geometric sound propagation through an inhomogeneous and moving ocean: Scattering by small scale internal wave currents (L)	John A. Colosi	705
Confirmation of the Biot theory for water-saturated sands at high frequencies and effects of scattering on the attenuation of sound waves (L)	Keiichi Ohkawa	709
Comment on "The cochlear amplifier as a standing wave: 'Squirting' waves between rows of outer hair cells?" [J. Acoust. Soc. Am. 116, 1016-1024 (2004)] (L)	Eric L. LePage	712
Technique for "tuning" vocal tract area functions based on acoustic sensitivity functions (L)	Brad H. Story	715
Absolute pitch among American and Chinese conservatory students: Prevalence differences, and evidence for a speech-related critical period (L)	Diana Deutsch, Trevor Henthorn, Elizabeth Marvin, HongShuai Xu	719
APPLIED ARTICLE-GENERAL LINEAR ACOUSTICS [20]		
Description and measurement of the acoustic characteristics of two-tailpipe mufflers	A. J. Torregrosa, A. Broatch, T. Fernández, F. D. Denia	723
GENERAL LINEAR ACOUSTICS [20]		
Elastoacoustic model with uncertain mechanical properties for ultrasonic wave velocity prediction: Application to cortical bone evaluation	Karina Macocco, Quentin Grimal, Salah Naili, Christian Soize	729
Two-dimensional problems of diffraction by finite collinear structures	Bair V. Budaev, David B. Bogey	741
Causal analysis of transient viscoelastic wave propagation	André Moura	751
A two-dimensional model of a directional microphone: Calculation of the normal force and moment on the diaphragm	Dorel Homentcovschi, Matthew J. Aubrey, Ronald N. Miles	756

(Continued)

THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

VOL. 119, NO. 2, FEBRUARY 2006

CONTENTS—Continued from preceding page

Characterization of scatterer motion in a reverberant medium	Stéphane G. Conti, Julien de Rosny, Philippe Roux, David A. Demer	769
Viscous scattering of a pressure wave: Calculation of the fluid tractions on a biomimetic acoustic velocity sensor	Dorel Homentcovschi, Ronald N. Miles	777
Modal density of rectangular volumes, areas, and lines	R. D. Blevins	788
Probe-corrected near-field measurements on a truncated cylinder	Thorkild B. Hansen	792
Obtaining the complex pressure field at the hologram surface for use in near-field acoustical holography when pressure and in-plane velocities are measured	Michael C. Harris, Jonathan D. Blotter, Scott D. Sommerfeldt	808
Scattering by quasi-symmetric pipes	Michael Carley	817
AEROACOUSTICS, ATMOSPHERIC SOUND [28]		
Wind-induced noise in a screened microphone	G. P. van den Berg	824
Framework for wind noise studies	Richard Raspet, Jeremy Webster, Kevin Dillion	834
UNDERWATER SOUND [30]		
Acoustic detection and quantification of benthic egg beds of the squid <i>Loligo opalescens</i> in Monterey Bay, California	Kenneth G. Foote, Roger T. Hanlon, Pat J. Iampietro, Rikk G. Kvitek	844
ULTRASONICS, QUANTUM ACOUSTICS, AND PHYSICAL EFFECTS OF SOUND [35]		
Separation of thermoviscous losses in Celcor™ ceramic	Jin Liu, Steven L. Garrett, Gregory S. Long, Ayusman Sen	857
Acoustic measurement of lubricant-film thickness distribution in ball bearings	Jie Zhang, Bruce W. Drinkwater, Rob S. Dwyer-Joyce	863
A phase reconstruction algorithm for Lamb wave based structural health monitoring of anisotropic multilayered composite plates	Jagannathan Rajagopalan, Krishnan Balasubramaniam, C. V. Krishnamurthy	872
TRANSDUCTION [38]		
A comparison of the underwater acoustic performance of single crystal versus piezoelectric ceramic-based "cymbal" projectors	James F. Tressler, Thomas R. Howarth, Dehua Huang	879
Optimally sensitive and efficient compact loudspeakers	Ronald M. Aarts	890
STRUCTURAL ACOUSTICS AND VIBRATION [40]		
A method for structural vibration characterization in the midfrequency region	W. Steve Shepard, Jr., Yi Liu	897
Longitudinal vibration frequencies of steadily whirling rods	W. S. Shum, R. D. Entwistle	909
A closed form solution for the dynamic response of finite ribbed plates	Tian Ran Lin, Jie Pan	917
Hybrid vibration isolator: Single axis control study	Peter C. Herdic, Robert D. Corsaro, Brian H. Houston, Robert M. Baden	926
ACOUSTICAL MEASUREMENTS AND INSTRUMENTATION [58]		
A numerical investigation of the influence of windscreens on measurement of sound intensity	Peter Juhl, Finn Jacobsen	937

(Continued)

CONTENTS—Continued from preceding page

A four particle velocity sensor device	D. R. Yntema, W. F. Druyvesteyn, M. Elwenspoek	943
ACOUSTIC SIGNAL PROCESSING [60]		
A cross-spectrum weighting algorithm for speech enhancement and array processing: Combining phase-shift information and stationary signal properties	Ingo Schwetz, Gerhard Gruhler, Klaus Obermayer	952
An inversion of Freedman's "image pulse" model in air	Janos Tsakiris, Phillip McKerrow	965
Demonstration at sea of the decomposition-of-the-time-reversal-operator technique	Charles F. Gaumond, David M. Fromm, Joseph F. Lingeitch, Richard Menis, Geoffrey F. Edelmann, David C. Calvo, Elisabeth Kim	976
PHYSIOLOGICAL ACOUSTICS [64]		
Mechanism for bandpass frequency characteristic in distortion product otoacoustic emission generation	P. F. Fahey, B. B. Stagner, G. K. Martin	991
Invariance principles for cochlear mechanics: Hearing phases	H. M. Reimann	997
Model for vocalization by a bird with distensible vocal cavity and open beak	Neville H. Fletcher, Tobias Riede, Roderick A. Suthers	1005
PSYCHOLOGICAL ACOUSTICS [66]		
Induced loudness reduction as a function of exposure time and signal frequency	Eva Wagner, Bertram Scharf	1012
Comodulation detection differences for fixed-frequency and roved-frequency maskers	Joseph W. Hall, III, Emily Buss, John H. Grose	1021
Resolution in azimuth sound localization in the Mongolian gerbil (<i>Meriones unguiculatus</i>)	Julia K. Maier, Georg M. Klump	1029
SPEECH PRODUCTION [70]		
Measurement of temporal changes in vocal tract area function from 3D cine-MRI data	Hironori Takemoto, Kiyoshi Honda, Shinobu Masaki, Yasuhiro Shimada, Ichiro Fujimoto	1037
A constitutive model of the human vocal fold cover for fundamental frequency regulation	Kai Zhang, Thomas Siegmund, Roger W. Chan	1050
Characterizing glottal jet turbulence	Fariborz Alipour, Ronald C. Scherer	1063
The effect of intertalker speech rate variation on acoustic vowel space	Ying-Chiao Tsao, Gary Weismer, Kamran Iqbal	1074
SPEECH PERCEPTION [71]		
Measuring the critical band for speech	Eric W. Healy, Sid P. Bacon	1083
On the perception of voicing in syllable-initial plosives in noise	Jintao Jiang, Marcia Chen, Abeer Alwan	1092
Experimental comparison between speech transmission index, rapid speech transmission index, and speech intelligibility index	Petra Larm, Valtteri Hongisto	1106
Perception and production of English vowels by Mandarin speakers: Age-related differences vary with amount of L2 exposure	Gisela Jia, Winifred Strange, Yanhong Wu, Julissa Collado, Qi Guan	1118

(Continued)

THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA

VOL. 119, NO. 2, FEBRUARY 2006

CONTENTS—Continued from preceding page

Individual differences in auditory discrimination of spectral shape and speech-identification performance among elderly listeners	Mini N. Shrivastav, Larry E. Humes, Diane Kewley-Port	1131
Effect of age on detection of gaps in speech and nonspeech markers varying in duration and spectral symmetry	M. Kathleen Pichora-Fuller, Bruce A. Schneider, Nancy J. Benson, Stanley J. Hamstra, Edward Storzer	1143
Frequency transposition around dead regions simulated with a noiseband vocoder	Deniz Başkent, Robert V. Shannon	1156
MUSIC AND MUSICAL INSTRUMENTS [75]		
Autocorrelation in meter induction: The role of accent structure	Petri Toiviainen, Tuomas Eerola	1164
Material identification of real impact sounds: Effects of size variation in steel, glass, wood, and plexiglass plates	Bruno L. Giordano, Stephen McAdams	1171
A structurally guided method for the decomposition of expression in music performance	W. Luke Windsor, Peter Desain, Amandine Penel, Michiel Borkent	1182
Vocal tract resonances and the sound of the Australian didgeridu (yidaki) I. Experiment	Alex Z. Tarnopolsky, Neville H. Fletcher, Lloyd C. L. Hollenberg, Benjamin D. Lange, John Smith, Joe Wolfe	1194
Vocal tract resonances and the sound of the Australian didgeridu (yidaki) II. Theory	N. H. Fletcher, L. C. L. Hollenberg, J. Smith, A. Z. Tarnopolsky, J. Wolfe	1205
BIOACOUSTICS [80]		
Lateral distribution of ultrasound velocity in horizontal layers of human teeth	Christoph John	1214
Nonoptimal propagation of advertisement calls of midwife toads in Iberian habitats	Mario Penna, Rafael Márquez, Jaime Bosch, Eduardo G. Crespo	1227
Noninvasive generation and measurement of propagating waves in arterial walls	Xiaoming Zhang, James F. Greenleaf	1238
The spatial context of free-ranging Hawaiian spinner dolphins (<i>Stenella longirostris</i>) producing acoustic signals	Marc O. Lammers, Michiel Schotten, Whitlow W. L. Au	1244
Phase effects in masking by harmonic complexes in birds	Amanda M. Lauer, Robert J. Dooling, Marjorie R. Leek, Jennifer J. Lentz	1251
Preliminary evidence for the use of microseismic cues for navigation by the Namib golden mole	Edwin R. Lewis, Peter M. Narins, Jennifer U. M. Jarvis, Gary Bronner, Matthew J. Mason	1260
Hearing sensitivity and critical ratios of hooded crows (<i>Corvus corone cornix</i>)	Kenneth K. Jensen, Signe Klokke	1269
JASA EXPRESS LETTERS		
Spherically focused capacitive-film, air-coupled ultrasonic transducer	Junho Song, D. E. Chimenti, Stephen D. Holland	EL1
Predicting perceived sharpness of broadband noise from multiple moments of the specific loudness distribution	Atsushi Marui, William L. Martens	EL7
Directionality of sperm whale sonar clicks and its relation to piston radiation theory	Kristian Beedholm, Bertel Møhl	EL14
CUMULATIVE AUTHOR INDEX		1279