

Acoustic and Biomedical Engineering

- R. Barański, *Searching for New Measurement Solutions in the Area of Estimating Danger of Local Vibrations at Workplace*..... 3
- W. Batko, *Numerical Errors — Numerical Uncertainty — in the Identification and Estimation of Vibroacoustic Processes*..... 7
- W. Batko, B. Stepień, *Application of the Bootstrap Estimator for Uncertainty Analysis of the Long-Term Noise Indicators*..... 11
- A. Brański, M. Borkowski, S. Szela, *The Idea of the Selection of PZT-Beam Interaction Forces in Active Vibration Protection Problem*..... 17
- Z. Damijan, *The Influence of the Vibroacoustic Environment Conditions on Functional Stability of Drivers*..... 23
- Z. Damijan, *Investigation of the Vibroacoustic Climate Inside the Buses MAN SG242 Used in Public Transport Systems* 27
- Z. Damijan, C. Kasprzak, *Investigation of Physical Climate Inside the Lake Wessel Chamber*..... 31
- Z. Damijan, A. Uhryński, *The Influence of Driver's Working Environment on Thermal Changes of Their Organism* 35
- D. Dąbrowski, E. Jamro, W. Cioch, *Hardware Implementation of Artificial Neural Networks for Vibroacoustic Signals Classification*..... 41
- Z. Dąbrowski, *Diagnostic Inferring on the Bases of Non-linear Models*..... 45
- J. Dziurdź, *Transformation of Nonstationary Signals into Pseudostationary Signals for the Needs of Vehicle Diagnostics*..... 49
- M. Gauza, L. Kubisz, *Electrical Conductivity of Fish Skin Collagen in the Temperature Range 290–380 K*..... 54
- I. Gloza, *Experimental Investigation of Underwater Noise Produced by Ships by Means of Sound Intensity Method*... 58
- A. Gołaś, K. Suder-Dębska, R. Filipek, *The Influence of Sound Source Directivity on Acoustics Parameters Distribution in Kraków Opera House*..... 62
- G. Grelowska, E. Kozaczka, *Sounding of Layered Marine Bottom — Model Investigations*..... 66
- D. Hojan-Jeziarska, A. Olejnik, *Effectiveness of Selected Procedures of Hearing Aid Adaptation — Clinical Cases*.. 71
- M. Jabłoński, A.A. Ozga, *Distribution of Stochastic Impulses Acting on an Oscillator as a Function of Its Motion*..... 74
- T. Kamiński, *Acoustic Simulation and Experimental Studies of Theatres and Concert Halls*..... 78
- T. Kamiński, J. Rubacha, A. Pilch, *The Study of Sound Scattering Structures for the Purposes of Room Acoustic Enhancement*..... 83
- C. Kasprzak, *The Influence of Infrasonics on the Electrocardiograph Patterns in Humans*..... 87
- E. Kozaczka, G. Grelowska, S. Kozaczka, *Images of the Seabed of the Gulf of Gdańsk Obtained by Means of the Parametric Sonar*..... 91
- M. Kozupa, J. Wiciak, *Active Vibration Control of Rectangular Plate with Distributed Piezoelements Excited Acoustically and Mechanically*..... 95
- S. Kruszewski, D.M. Kruszewska, *Fluorescence Spectroscopy in Camptothecins Studies*..... 99
- L. Kubisz, D. Hojan-Jeziarska, *DC Electrical Conductivity in Studies on Solid-State Proteins*..... 103
- A. Kulowski, *Acoustics of Concert Hall at Academy of Music in Gdańsk, Project and Realization*..... 106
- K. Leo, *Speech Intelligibility Measurements in Auditorium*..... 110
- P. Leśna, E. Skrodzka, *Subjective Evaluation of Classroom Acoustics by Teenagers vs. Reverberation Time*..... 115
- P. Malecki, J. Wiciak, *Sound Pressure Level Analysis of Commercials and Regular Programs*..... 118
- M. Meissner, *Simulation of Acoustical Properties of Coupled Rooms Using Numerical Technique Based on Modal Expansion*..... 123
- D. Mleczo, T. Wszolek, *Variability Influence of Input Parameters on Result of Room Acoustic Calculation*..... 128
- Z. Piotrowski, K. Różanowski, *Robust Algorithm for Heart Rate (HR) Detection and Heart Rate Variability (HRV) Estimation*..... 131
- M. Połomska, L. Kubisz, R. Kalawski, G. Oszkini, R. Filipiak, A. Mazurek, *Fourier Transform Near Infrared Raman Spectroscopy in Studies on Connective Tissue*..... 136
- W.P. Rdzanek, W.J. Rdzanek, K. Szemela, *Asymptotic Formulae of the Modal Acoustic Impedance for the Asymmetric Vibrations of a Clamped Circular Plate*..... 141
- E. Skrodzka, D. Hojan-Jeziarska, *Assessment of Amplification Benefit for a Subject with Cochlear Dead Regions*... 155
- W. Staroń, L. Herbowski, *The Distribution of Biological Particles Suspended in Normal Cerebrospinal Fluid (CSF)*159
- O. Stieler, M. Karlik, W. Szyfter, *Intraoperative Impedance Measurements for the Evaluation of Perimodiolar Location of Cochlear Implant Electrode — Own Experience*..... 161
- D. Szczegielniak, A. Milewski, *Structure Optimization of Phase-Coded Sounding Signals*..... 164
- R. Trojanowski, J. Wiciak, *Preliminary Results of Laboratory Tested System for Active Control of Plates VIA LabVIEW and Piezoelectric Elements*..... 168
- S. Weyna, *An Acoustics Intensity Based Investigation of the Energy Flow Over the Barriers*..... 172
- A. Wicher, E. Ozimek, E. Szymiec, *Speech Intelligibility Measurements in Tinnitus Patients with and without Hearing Loss*..... 179
- J. Wierzbicki, *Reliability of Sound Field Simulations*.. 183
- D. Wróblewska, *Acoustical Standards Used in Design of School Spaces*..... 186
- W. Wszolek, M. Kłaczyński, *Analysis of Polish Pathological Speech by Higher Order Spectrum*..... 190