

Acoustic and Biomedical Engineering

- E. Hojan, M. Jakubowski, A. Talukder, H. Wereda, A. Furmann, R. Ewertowski, E. Skrodzka, P. Perz, P. Pękala, E. Bogusz, H. Lubawy, F. Tomaszewski, B. Czechyra, M. Orczyk, G. Szymański, M. Niewiarowicz, D. Hojan-Jezierska, A. Jezierska, *A New Method of Teaching Spatial Orientation to the Blind* ..... A-5
- M. Niewiarowicz, A. Furmann, *Localization of Acoustic Signals Used in Sound Emitters at Pedestrian Crosswalks* . . A-9
- E. Bogusz, H. Koprowska, E. Skrodzka, *Investigation of Performance in Selected Auditory Tasks by Blind and Visually Impaired Children and Teenagers* ..... A-13
- E. Bogusz, G. Mrozik, E. Skrodzka, *Investigation of Vibratory Detection Thresholds on Proximal Phalange and Wrist in Blind and Visually Impaired Teenagers* ..... A-19
- J. Wiciak, B. Borkowski, I. Czajka, *Prototype System for Marking and Identification of Dangerous Spots for Vision Impaired People — Size and Shape Testing Marking the Dangerous Spots Zone* ..... A-24
- Z. Damijan, A. Uhryński, *The Influence of General Low Frequency Vibration on Posture Stability* ..... A-28
- Z. Damijan, D. Iwański, G. Dahlke, *Investigation of the Vibroacoustic Climate Inside the Buses Solaris Urbino 12 Used in Public Transport Systems* ..... A-32
- Z. Damijan, A. Uhryński, *Systemic Cryotherapy Influence of Low Temperatures on Selected Physiological Parameters* ..... A-38
- K. Czopek, *Cardiac Activity Based on Acoustic Signal Properties* ..... A-42
- W. Staroń, L. Kubisz, L. Herbowski, *Preliminary Analysis of Size Distribution of Objects Suspended in Normal Cerebrospinal Fluid in Case of Ventricular Hydrocephalic Enlargement and Internal Hydrocephalus* ..... A-46
- L. Kubisz, R. Hołubowicz, M. Gauza, H. Li, D. Hojan-Jezierska, F. Jaroszyk, *Effect of Low Frequency Magnetic Field on Germination of Onion (Allium cepa L.) Seeds* A-49
- A. Marcinkowska-Gapińska, P. Kowal, *Analysis of Complex Viscosity in a Group of Patients with Circulation Disorders* ..... A-54
- H. Nawrocka-Bogusz, F. Jaroszyk, *The Effect of the Red Light on Reactive Oxygen Species Production by Neutrophils in Vitro* ..... A-57
- C. Kasprzak, *Influence of Infrasound on the Alpha Rhythm of EEG Signal* ..... A-61
- M. Gauza, L. Kubisz, *Influence of Transitional Metals Doping on Conductivity of Collagen Lyophilisate and Elastin* ..... A-65
- S. Kruszewski, M. Cyrankiewicz, *Aggregated Silver Sols as SERS Substrates* ..... A-68
- A. Sekula, A. Pruszewicz, O. Stieler, R. Gibasiewicz, M. Karlik, D. Komar, *Application of Vibratometry in Evaluation of Frequency Detection and Signal Intensity in Patients with Unilateral Cochlear Implants — Preliminary Results* ..... A-75
- A. Wicher, *The Effect of Amplitude Modulated Contralateral Signals on Distortion Product Otoacoustic Emissions* ..... A-78
- Z. Piotrowski, P. Gajewski, *Fidelity Estimation of Watermarked Audio Signals According to the ITU-R BS.1116-1 Standard* ..... A-82
- G. Demenko, M. Szymański, R. Cecko, E. Kuśmierk, M. Lange, K. Wegner, K. Klessa, M. Owsiany, *Development of Large Vocabulary Continuous Speech Recognition for Polish* ..... A-86
- G. Demenko, M. Jastrzębska, *Analysis of Natural Speech under Stress* ..... A-92
- D. Hojan-Jezierska, M. Pankowska, A. Wicher, E. Szymiec, M. Kraśnik, M. Knapkiewicz, *Synergistic Effect of ELF-Magnetic Field and IR-Radiation on Tinnitus Patients* ..... A-96
- K. Szemela, W.P. Rdzanek, W.J. Rdzanek, *The Acoustic Pressure Radiated by a Vibrating Circular Plate within the Fraunhofer Zone of the Three-Wall Corner Region* . . . A-100
- P. Małecki, J. Wiciak, J. Wierzbicki, *Subjective Assessment of the Multi-Channel Auralizations* ..... A-110
- P. Kleczkowski, M. Pluta, *Normally Hearing Subjects Have No Advantage of Better Audiograms in Listening Tasks* ..... A-115
- P. Kleczkowski, M. Pluta, *Frequency Discrimination in a Simultaneous Two-Tone Signal* ..... A-120
- A. Brański, *Modes Orthogonality of the Mechanical System Simple Supported Beam-Actuators-Concentrated Masses* ..... A-126
- M.S. Koziń, *Acoustic Nearfield and Farfield for Vibrating Piston in Geometrical and Intensity Formulations* . . . A-132
- J. Wiciak, K. Dąbrowski, *The Influence of Alarm Siren Structure Parameters on Output Sound Pressure Level* ..... A-136
- M. Wiciak, *Analytical Solution of the Problem of Vibration of Plates with Piezoelectric Actuators with Arbitrary Shape in Distribution Formulation* ..... A-142
- R. Trojanowski, J. Wiciak, *Structural Noise Reduction and Its Effects on Plate Vibrations* ..... A-148
- W. Batko, P. Pawlik, *Uncertainty Evaluation in Modelling of Acoustic Phenomena with Uncertain Parameters Using Interval Arithmetic* ..... A-152
- W. Batko, B. Przysucha, *Uncertainty Assessment of Index M* ..... A-156
- J. Leśkow, *Cyclostationarity and Resampling for Vibroacoustic Signals* ..... A-160
- M. Meissner, *Accuracy Issues of Discrete Hilbert Transform in Identification of Instantaneous Parameters of Vibration Signals* ..... A-164
- L. Majkut, *Quantitative Analysis of Phase Trajectory as the Information about Technical Condition of the Object* ..... A-168

(continued on the previous page)

M. Jabłoński, A. Ozga, <i>Determining the Distribution of Values of Stochastic Impulses Acting on a Discrete System in Relation to Their Intensity</i> .....	A-174
M. Kłaczyński, T. Wszolek, <i>Detection and Classification of Selected Noise Sources in Long-Term Acoustic Climate Monitoring</i> .....	A-179
J. Piechowicz, <i>An Application of the Inverse Method in the Vibroacoustic Analysis of Industrial Rooms</i> .....	A-183
J. Snamina, B. Sapiński, W. Wszolek, M. Romaszko, <i>Investigation on Vibrations of a Cantilever Beam with Magnetorheological Fluid by Using the Acoustic Signal</i> .....	A-188
S. Kasprzyk, R. Marczuk, <i>Construction of Equivalent Models of Continuous and Discrete-Continuous Systems</i> ...	A-191
K. Leo, <i>Sound Field Diffusivity Assessment in Non-Stationary State by Measuring Nonuniformity of Sound Decay Curve</i> .....	A-197
D. Wróblewska, K. Leo, <i>Influence of Acoustical Adaptation on Classroom's Acoustical Environment</i> .....	A-201