

2018 26th European Signal Processing Conference (EUSIPCO 2018)

**Roma, Italy
3-7 September 2018**

Pages 1-597



**IEEE Catalog Number: CFP1840S-POD
ISBN: 978-1-5386-3736-4**

**Copyright © 2018, The European Association for Signal Processing (EURASIP)
All Rights Reserved**

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1840S-POD
ISBN (Print-On-Demand):	978-1-5386-3736-4
ISBN (Online):	978-9-0827-9701-5
ISSN:	2219-5491

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

TABLE OF CONTENTS

DISTANT NOISE REDUCTION BASED ON MULTI-DELAY NOISE MODEL USING DISTRIBUTED MICROPHONE ARRAY	1
<i>Yuma Koizumi ; Shoichiro Saito ; Suehiro Shimauchi ; Kazunori Kobayashi ; Noboru Harada</i>	
JOINT BEAMFORMING AND ECHO CANCELLATION COMBINING QRD BASED MULTICHANNEL AEC AND MVDR FOR REDUCING NOISE AND NON-LINEAR ECHO	6
<i>Alejandro Cohen ; Anna Barnov ; Shmulik Markovich-Golan ; Peter Kroon</i>	
STEERABLE CIRCULAR DIFFERENTIAL MICROPHONE ARRAYS	11
<i>Jacopo Lovatello ; Alberto Bernardini ; Augusto Sarti</i>	
SPEECH ENHANCEMENT BY CLASSIFICATION OF NOISY SIGNALS DECOMPOSED USING NMF AND WIENER FILTERING	16
<i>Mahmoud Fakhry ; Amir Hossein Poorjam ; Mads Græsboll Christensen</i>	
JOINT IDENTIFICATION AND LOCALIZATION OF A SPEAKER IN ADVERSE CONDITIONS USING A MICROPHONE ARRAY	21
<i>Daniele Salvati ; Carlo Drioli ; Gian Luca Foresti</i>	
ACOUSTIC BEAMFORMING IN FRONT OF A REFLECTIVE PLANE	26
<i>Nikolaos Stefanakis ; Symeon Delikaris-Manias ; Athanasios Mouchtaris</i>	
VELOCITY VARIABILITY IN MRI PHASE-CONTRAST	31
<i>Ali Dehghan Firoozabadi ; Pablo Irarrazaval ; Sergio Uribe ; Cristian Tejos ; Carlos Sing-Long</i>	
ANALYSIS VS SYNTHESIS-BASED REGULARIZATION FOR COMBINED COMPRESSED SENSING AND PARALLEL MRI RECONSTRUCTION AT 7 TESLA	36
<i>H. Cherkaoui ; L. El Gueddari ; C. Lazarus ; A. Grigis ; F. Poupon ; A. Vignaud ; S. Farrens ; J.-L. Starck ; P. Ciuciu</i>	
A HIERARCHICAL ENSEMBLE CLASSIFIER FOR MULTILABEL SEGMENTATION OF FAT-WATER MR IMAGES	41
<i>Faezeh Fallah ; Bin Yang ; Sven S. Walter ; Fabian Bamberg</i>	
HIGH FREQUENCY NOISE DETECTION AND HANDLING IN ECG SIGNALS	46
<i>Kjell Le ; Trygve Eftestøl ; Kjersti Engan ; Stein Ørn ; Øyunn Kleiven</i>	
DENOISING PHONOCARDIOGRAM SIGNALS WITH NON-NEGATIVE MATRIX FACTORIZATION INFORMED BY SYNCHRONOUS ELECTROCARDIOGRAM	51
<i>Nafissa Dia ; Julie Fontecave-Jallon ; Pierre-Yves Gumery ; Bertr Rivet</i>	
FUSION OF EEG AND FMRI VIA SOFT COUPLED TENSOR DECOMPOSITIONS	56
<i>Christos Chatzichristos ; Mike Davies ; Javier Escudero ; Eleftherios Kofidis ; Sergios Theodoridis</i>	
DEEPMQ: A DEEP LEARNING APPROACH BASED MYELIN QUANTIFICATION IN MICROSCOPIC FLUORESCENCE IMAGES	61
<i>Sibel Çimen ; Abdulkemir Çapar ; Dursun Ali Ekinci ; Umut Engin Ayten ; Bilal Ersen Kerman ; Behçet Ugur Töreyn</i>	
ENSEMBLE LEARNING FOR DETECTION OF SHORT EPISODES OF ATRIAL FIBRILLATION	66
<i>Abdolrahman Peimankar ; Sadasivan Puthusserypady</i>	
AN ADMM ALGORITHM FOR CONSTRAINED MATERIAL DECOMPOSITION IN SPECTRAL CT	71
<i>Tom Hohweiller ; Nicolas Ducros ; Françoise Peyrin ; Bruno Sixou</i>	
A RESOLUTION ENHANCEMENT TECHNIQUE FOR ULTRAFAST CODED MEDICAL ULTRASOUND	76
<i>Denis Bujoreanu ; Yanis Mehdi Benane ; Hervé Liebzott ; Barbara Nicolas ; Olivier Basset ; Denis Friboulet</i>	
AN ENHANCED CHIRP MODULATED GOLAY CODE FOR ULTRASOUND DIVERGING WAVE COMPOUNDING	81
<i>Yanis Mehdi Benane ; Denis Bujoreanu ; Christian Cachard ; Barbara Nicolas ; Olivier Basset</i>	
BEAMFORMING AND BLIND SOURCE SEPARATION HAVE A COMPLEMENTARY EFFECT IN REDUCING TONIC CRANIAL MUSCLE CONTAMINATION OF SCALP MEASUREMENTS	86
<i>Azin S. Janani ; Tyler S. Grummett ; Hanieh Bakhshayesh ; John O. Willoughby ; Kenneth J. Pope</i>	
MULTI-TASK FEATURE LEARNING FOR EEG-BASED EMOTION RECOGNITION USING GROUP NONNEGATIVE MATRIX FACTORIZATION	91
<i>Ayoub Hajlaoui ; Mohamed Chetouani ; Slim Essid</i>	
A DYNAMIC MODEL OF SYNTHETIC RESTING-STATE BRAIN HEMODYNAMICS	96
<i>Rashid Ghorbani Afkhami ; Kathy Low ; Frederick Walker ; Sarah Johnson</i>	

HOW MANY CHANNELS ARE ENOUGH? EVALUATION OF TONIC CRANIAL MUSCLE ARTEFACT REDUCTION USING ICA WITH DIFFERENT NUMBERS OF EEG CHANNELS	101
<i>Azin S. Janani ; Tyler S. Grummett ; Hanieh Bakhshayesh ; Trent W. Lewis ; John O. Willoughby ; Kenneth J. Pope</i>	
CLASSIFICATION OF EEG SIGNALS BASED ON MEAN-SQUARE ERROR OPTIMAL TIME-FREQUENCY FEATURES	106
<i>Rachele Anderson ; Maria Sandsten</i>	
A PRECONDITIONED GRAPH DIFFUSION LMS FOR ADAPTIVE GRAPH SIGNAL PROCESSING	111
<i>Fei Hua ; Roula Nassifl ; Cédric Richard ; Haiyan Wang ; Ali H. Sayed</i>	
SPECTRAL MAB FOR UNKNOWN GRAPH PROCESSES	116
<i>Laura Toni ; Pascal Frossard</i>	
BLIND IDENTIFICATION OF INVERTIBLE GRAPH FILTERS WITH MULTIPLE SPARSE INPUTS	121
<i>Chang Ye ; Rasoul Shafipour ; Gonzalo Mateos</i>	
A NOVEL METHOD FOR SAMPLING BANDLIMITED GRAPH SIGNALS	126
<i>Dion Eustathios Olivier Tzamaras ; Pinar Akyazi ; Pascal Frossard</i>	
ONLINE RECOVERY OF TIME- VARYING SIGNALS DEFINED OVER DYNAMIC GRAPHS	131
<i>Paolo Di Lorenzo ; Elena Ceci</i>	
EXTREME LEARNING MACHINE FOR GRAPH SIGNAL PROCESSING	136
<i>Arun Venkitararnan ; Saikat Chatterjee ; Peter Händel</i>	
SHEARLET-BASED LOOP FILTER	141
<i>Johannes Erfurt ; Wang-Q Lim ; Heiko Schwarz ; Detlev Marpe ; Thomas Wiegand</i>	
ADAPTIVE VIDEO ENCODING FOR TIME-CONSTRAINED COMPRESSION AND DELIVERY	146
<i>André Seixas Dias ; Saverio Blasi ; Marta Mrak ; Shenglan Huang ; Ebroul Izquierdo</i>	
A LOSSLESS IMAGE CODING METHOD BASED ON PROBABILITY MODEL OPTIMIZATION	151
<i>Ichiro Matsuda ; Tomokazu Ishikawa ; Yusuke Kameda ; Susumu Itoh</i>	
CODING GAIN OPTIMIZED 8-POINT DST WITH FAST ALGORITHM FOR INTRA-FRAMES IN VIDEO CODING	156
<i>M. Hüseyin Cilasun ; Fatih Kamlı</i>	
NOISY ENCRYPTED IMAGE CORRECTION BASED ON SHANNON ENTROPY MEASUREMENT IN PIXEL BLOCKS OF VERY SMALL SIZE	161
<i>Pauline Puteaux ; William Puech</i>	
VISUAL SALIENCY GUIDED HIGH DYNAMIC RANGE IMAGE COMPRESSION	166
<i>Tian Feng ; Charith Abhayaratne</i>	
END-TO-END REAL-TIME ROI-BASED ENCRYPTION IN HEVC VIDEOS	171
<i>Mohammed Abu Taha ; N. Sidaty ; W. Hamidouche ; O. Dforges ; J. Vanne ; M. Viitanen</i>	
ITERATIVE WEIGHTED LEAST SQUARES FREQUENCY ESTIMATION FOR HARMONIC SINUSOIDAL SIGNAL IN POWER SYSTEMS	176
<i>Jiadong Sun ; Elias Aboutanios ; David B. Smith</i>	
RENEWABLE ENERGY OPTIMIZATION WITH CENTRALIZED AND DISTRIBUTED GENERATION	181
<i>Johann Leithon ; Stefan Werner ; Visa Koivunen</i>	
DEEP RESIDUAL NEURAL NETWORK FOR EMI EVENT CLASSIFICATION USING BISPECTRUM REPRESENTATIONS	186
<i>Imene Mitiche ; Mark David Jenkins ; Philip Boreham ; Alan Nesbitt ; Brian G. Stewart ; Gordon Morison</i>	
COOPERATIVE RENEWABLE ENERGY MANAGEMENT WITH DISTRIBUTED GENERATION	191
<i>Johann Leithon ; Stefan Werner ; Visa Koivunen</i>	
MOTOR CONDITION MONITORING BY EMPIRICAL WAVELET TRANSFORM	196
<i>Levent Eren ; Yalcin Cekic ; Michael J. Devaney</i>	
A NOVEL KINECT V2 REGISTRATION METHOD USING COLOR AND DEEP GEOMETRY DESCRIPTORS	201
<i>Yuan Gao ; Tim Michels ; Reinhard Koch</i>	
AREA-BASED DEPTH ESTIMATION FOR MONOCHROMATIC FEATURE-SPARSE ORTHOGRAPHIC CAPTURE	206
<i>Yongwei Li ; Gabriele Scrofani ; Mårten Sjöström ; M. Martinez-Corral</i>	
ON THE POSSIBILITY TO ACHIEVE 6-DOF FOR 360 VIDEO USING DIVERGENT MULTI-VIEW CONTENT	211
<i>Bappaditya Ray ; Joel Jung ; Mohamed-Chaker Larabi</i>	

CONTINUOUS REFOCUSING FOR INTEGRAL MICROSCOPY WITH FOURIER PLANE RECORDING	216
<i>Sergio Moreschini ; Gabriele Scrofani ; Robert Brcgovic ; Genaro Saavedra ; Atanas Gotchev</i>	
MODELING THE PAIRWISE DISPARITIES IN HIGH DENSITY CAMERA ARRAYS	221
<i>Ioan Tabus ; Pekka Astola</i>	
MULTI-SHOT SINGLE SENSOR LIGHT FIELD CAMERA USING A COLOR CODED MASK	226
<i>Ehsan Miandji ; Jonas Unger ; Christine Guillemot</i>	
LOW COST SETUP FOR HIGH RESOLUTION MULTIVIEW PANORAMA RECORDING AND REGISTRATION	231
<i>Matthias Ueberheide ; Moritz Muehlhausen ; Marcus Magnor</i>	
LENSET LIGHT FIELD PANORAMA CREATION: A SUB-APERTURE IMAGE STITCHING APPROACH	236
<i>André Oliveira ; Catarina Brites ; João Ascenso ; Fernando Pereira</i>	
LIGHT - FIELDS OF CIRCULAR CAMERA ARRAYS	241
<i>Aron Cserkaszkzy ; Peter A. Kara ; Attila Barsi ; Maria G. Martini ; Tibor Balogh</i>	
A RENDERING SOLUTION TO DISPLAY LIGHT FIELD IN VIRTUAL REALITY	246
<i>Evgeniy Upenik ; Irene Viola ; Touradj Ebrahimi</i>	
MULTI-STEREO MATCHING FOR LIGHT FIELD CAMERA ARRAYS	251
<i>Ségolène Rogge ; Beerend Ceulemans ; Quentin Bolsée ; Adrian Munteanu</i>	
STEERED MIXTURE-OF-EXPERTS APPROXIMATION OF SPHERICAL IMAGE DATA	256
<i>Ruben Verhack ; Nilesh Madhu ; Glenn Van Wallendael ; Peter Lambert ; Thomas Sikora</i>	
A FRESH LOOK AT THE SEMIPARAMETRIC CRAMÉR-RAO BOUND	261
<i>Stefano Fortunati ; Fulvio Gini ; Maria Greco ; Abdelhak M. Zoubir ; Muralidhar Rangaswamy</i>	
BAYESIAN MULTI-CLASS COVARIANCE MATRIX FILTERING FOR ADAPTIVE ENVIRONMENT LEARNING	266
<i>Paolo Braca ; Augusto Aubry ; Leonardo M. Millefiori ; Antonio De Maio ; Stefano Marano</i>	
GENERALIZED CONDITIONAL MAXIMUM LIKELIHOOD ESTIMATORS IN THE LARGE SAMPLE REGIME	271
<i>Eric Chaumette ; Francois Vincent ; Alexandre Renaux ; Jerome Galy</i>	
A NOVEL RECURSIVE BAYESIAN WEIGHTED INSTRUMENTAL VARIABLE ESTIMATOR FOR 3D BEARINGS-ONLY TMA	276
<i>Laleh Badriasl ; Sanjeev Arulampalam ; Anthony Finn</i>	
PERFORMANCE BOUNDS FOR CHANGE POINT AND TIME DELAY ESTIMATION	281
<i>Chengfang Ren ; Alexandre Renaux ; Sylvain Azarian</i>	
CONSISTENT SPECTRAL METHODS FOR DIMENSIONALITY REDUCTION	286
<i>Malika Kharouf ; Tabea Rebařka ; Nataliya Sokolovska</i>	
REFINED GENERALIZED MULTIVARIATE MULTISCALE FUZZY ENTROPY: A PRELIMINARY STUDY ON MULTICHANNEL PHYSIOLOGICAL COMPLEXITY DURING POSTURAL CHANGES	291
<i>Mimma Nardelli ; Enzo Pasquale Scilingo ; Gaetano Valenza</i>	
BUILDING A TENSOR FRAMEWORK FOR THE ANALYSIS AND CLASSIFICATION OF STEADY-STATE VISUAL EVOKED POTENTIALS IN CHILDREN	296
<i>Eli Kinney-Lang ; Ahmed Ebied ; Javier Escudero</i>	
COMPARISON OF PARAMETRIC AND NON-PARAMETRIC POPULATION MODELLING OF SPORT PERFORMANCES	301
<i>Stéphane Bermon ; Asya Metelkina ; Maria João Rendas</i>	
CONSTRAINED PARTICLE FILTER FOR IMPROVING KINECT BASED MEASUREMENTS	306
<i>Soumya Ranjan Tripathy ; Kingshuk Chakravarty ; Aniruddha Sinha</i>	
SUBSPACE CLASSIFICATION OF HUMAN GAIT USING RADAR MICRO-DOPPLER SIGNATURES	311
<i>Ann- Kathrin Seifert ; Lukas Schäfer ; Moeness G. Amin ; Abdelhak M. Zoubir</i>	
A NEW STREAM CIPHER BASED ON NONLINEAR DYNAMIC SYSTEM	316
<i>O. Mannai ; R. Becheikh ; R. Rhouma</i>	
SPECIES RELATED GAS TRACKING IN DISTRIBUTION GRIDS	321
<i>Athanassios Alexiou ; Joachim Schenk</i>	
FAST ALGORITHMS FOR THE SCHUR- TYPE NONLINEAR PARAMETRIZATION OF HIGHER-ORDER STOCHASTIC PROCESSES	326
<i>Agnieszka Wielgus ; Jan Zarzycki</i>	
EFFICIENT GENERATION OF RANDOM SIGNALS WITH PRESCRIBED PROBABILITY DISTRIBUTION AND SPECTRAL BANDWIDTH VIA ERGODIC TRANSFORMATIONS	331
<i>Andre M. Mcdonald ; Michaël A. Van Wyk</i>	

COMBINED SPARSE REGULARIZATION FOR NONLINEAR ADAPTIVE FILTERS	336
<i>Daniilo Communiello ; Michele Scarpiniti ; Simone Scardapane ; Luis A. Azpicueta-Ruiz ; Aurelio Uncini</i>	
LOCALIZATION OF NEAR-FIELD SIGNALS BASED ON LINEAR PREDICTION AND OBLIQUE PROJECTION OPERATOR	341
<i>Wenyi Liu ; Weiliang Zuo ; Jingmin Xin ; Nanning Zheng ; Akira Sano</i>	
A COMPRESSED ENCODING SCHEME FOR APPROXIMATE TDOA ESTIMATION	346
<i>Elizabeth Vargas ; James R. Hopgood ; Keith Brown ; Kartic Subr</i>	
ROBUST STOCHASTIC MAXIMUM LIKELIHOOD ALGORITHM FOR DOA ESTIMATION OF ACOUSTIC SOURCES IN THE SPHERICAL HARMONIC DOMAIN	351
<i>Hossein Lolae ; Mohammad Ali Akhaee</i>	
3D LOCALIZATION OF MULTIPLE SIMULTANEOUS SPEAKERS WITH DISCRETE WAVELET TRANSFORM AND PROPOSED 3D NESTED MICROPHONE ARRAY	356
<i>Ali Dehghan Firoozabadi ; Hugo Durney ; Ismael Soto ; Miguel Sanhueza Olave</i>	
COMPLEXITY-REDUCED SOLUTION FOR TDOA SOURCE LOCALIZATION IN LARGE EQUAL RADIUS SCENARIO WITH SENSOR POSITION ERRORS	361
<i>Xi Li ; Fucheng Guo ; Le Yang ; K. C. Ho</i>	
A COMPARATIVE STUDY OF ORTHOGONAL MOMENTS FOR MICRO-DOPPLER CLASSIFICATION	366
<i>Sabrina Machhour ; Eric Grivel ; Pierrick Legrand ; Vincent Corretja ; Clement Magnant</i>	
EMBEDDING INTELLIGENT FEATURES FOR VIBRATION-BASED MACHINE CONDITION MONITORING	371
<i>Christian Reich ; Ahmad Mansour ; Kristof Van Laerhoven</i>	
MODELLING DATA WITH BOTH SPARSITY AND A GAUSSIAN RANDOM FIELD: APPLICATION TO DARK MATTER MASS MAPPING IN COSMOLOGY	376
<i>Konstantinos E. Themelis ; Francois Lanusse ; Niall Jeffrey ; Austin Peel ; Jean-Luc Starck ; Filipe B. Abdalla</i>	
AUTOMATED TIRE FOOTPRINT SEGMENTATION	380
<i>Rodrigo Nava ; Duc Fehr ; Frank Petry ; Thomas Tamisier</i>	
ADVANCED CYCLOSTATIONARY-BASED ANALYSIS FOR CONDITION MONITORING OF COMPLEX SYSTEMS	385
<i>Konstantinos Gryllias ; Alexandre Mauricio ; Junyu Qi</i>	
SPEECH DEREVERBERATION USING FULLY CONVOLUTIONAL NETWORKS	390
<i>Ori Ernst ; Shlomo E. Chazan ; Sharon Gannot ; Jacob Goldberger</i>	
EFFICIENT AMBIGUITY RESOLUTION IN POLARIMETRIC MULTI-VIEW STEREO	395
<i>A Anil Kumar ; N Narendra ; P Balamuralidhar ; M Girish Chandra</i>	
FAST AND ACCURATE GAUSSIAN PYRAMID CONSTRUCTION BY EXTENDED BOX FILTERING	400
<i>Silvère Konlambigue ; Jean-Baptiste Pothin ; Paul Honeine ; Abdelaziz Bensrhairt</i>	
AUTOMATIC FLOWER AND VISITOR DETECTION SYSTEM	405
<i>Data Thanh Tran ; Toke Thomas Høye ; Moncef Gabbouj ; Alexandros Iosifidis</i>	
DECISIONS UNDER BINARY MESSAGING OVER ADAPTIVE NETWORKS	410
<i>Stefano Marano ; Ali H. Sayed</i>	
EFFICIENT VARIANCE-REDUCED LEARNING OVER MULTI-AGENT NETWORKS	415
<i>Kun Yuan ; Bicheng Ying ; Ali H. Sayed</i>	
ESTIMATING THE TOPOLOGY OF NEURAL NETWORKS FROM DISTRIBUTED OBSERVATIONS	420
<i>Roxana Alexandru ; Pranav Malhotra ; Stephanie Reynolds ; Pier Luigi Dragotti</i>	
MODEL-BASED VOICE ACTIVITY DETECTION IN WIRELESS ACOUSTIC SENSOR NETWORKS	425
<i>Yingke Zhao ; Jesper Kjær Nielsen ; Mads Græsbøll Christensen ; Jinzdon Chen</i>	
OPTIMIZED SMALL CELL RANGE EXPANSION IN MOBILE COMMUNICATION NETWORKS USING MULTI-CLASS SUPPORT VECTOR MACHINES	430
<i>Florian Bahlke ; Marius Pesavento</i>	
ITERATIVE RECONSTRUCTION OF SPECTRALLY SPARSE SIGNALS FROM LEVEL CROSSINGS	435
<i>Mahdi Boloursaz Mashhadi ; Hadi Zayyani ; Saeed Gazor ; Farokh Marvasti</i>	
BAYESIAN INFERENCE WITH ERROR VARIABLE SPLITTING AND SPARSITY ENFORCING PRIORS FOR LINEAR INVERSE PROBLEMS	440
<i>Ali Mohammad-Djafari ; Mircea Dumitru ; Camille Chapdelaine ; Nicolas Gac</i>	
SAMPLING A NOISY MULTIPLE OUTPUT CHANNEL TO MAXIMIZE THE CAPACITY	445
<i>Gaston Solodky ; Meir Feder</i>	

ROUNDOFF NOISE ANALYSIS FOR GENERALIZED DIRECT-FORM II STRUCTURE OF 2-D SEPARABLE-DENOMINATOR DIGITAL FILTERS	450
<i>Takao Hinamoto ; Akimitsu Doi ; Wu-Sheng Lu</i>	
LOW-COMPLEXITY RLS ALGORITHMS FOR THE IDENTIFICATION OF BILINEAR FORMS.....	455
<i>Camelia Elisei-Iliescu ; Cristian Stanciu ; Constantin Paleologu ; Cristian Anghel ; Silviu Ciochina ; Jacob Benesty</i>	
SEQUENTIAL POLYNOMIAL QR DECOMPOSITION AND DECODING OF FREQUENCY SELECTIVE MIMO CHANNELS	460
<i>Diyari Hassan ; Soydan Redif ; Sangarapillai Lambotharan ; Ian K. Proudler</i>	
A NEW PROPORTIONATE ADAPTIVE FILTERING ALGORITHM WITH COEFFICIENT REUSE AND ROBUSTNESS AGAINST IMPULSIVE NOISE	465
<i>Rodrigo M. S. Pimenta ; Leonardo C. Resende ; Newton N. Siqueira ; Idiego B. Haddad ; Mariane R. Petraglia</i>	
MINIMUM LENGTH SOLUTION FOR ONE-DIMENSIONAL DISCRETE PHASE RETRIEVAL PROBLEM.....	470
<i>Corneliu Rusu ; Jaakko Astola</i>	
LOW-RATE FARROW STRUCTURE WITH DISCRETE-LOWPASS AND POLYNOMIAL SUPPORT FOR AUDIO RESAMPLING	475
<i>Aleksej Chinaev ; Philipp Thiine ; Gerald Enzner</i>	
EFFECT OF RANDOM SAMPLING ON NOISY NONSPARSE SIGNALS IN TIME-FREQUENCY ANALYSIS	480
<i>Isidora Stankovic ; Miloš Brajovic ; Miloš Dakovic ; Cornel Ioana</i>	
OPTIMIZING APPROXIMATE MESSAGE PASSING FOR VARIABLE MEASUREMENT NOISE.....	484
<i>Stefan C. Birgmeier ; Norbert Goertz</i>	
HEURISTICS FOR EFFICIENT SPARSE BLIND SOURCE SEPARATION.....	489
<i>Christophe Kervazo ; Jérôme Bobin ; Cécile Chenot</i>	
IMPROVED DISCRETE GREY WOLF OPTIMIZER	494
<i>Benoit Martin ; Julien Marot ; Salah Bourenmane</i>	
EFFICIENT SAMPLING RATE OFFSET COMPENSATION - AN OVERLAP-SAVE BASED APPROACH	499
<i>Joerg Schmalenstroerer ; Reinhold Haeb-Umbach</i>	
KERNEL ADAPTIVE HAMMERSTEIN FILTER	504
<i>Yunfei Zheng ; Jiyao Dong ; Wentao Ma ; Badong Chen</i>	
OCTONION SPECTRUM OF 3D OCTONION- VALUED SIGNALS - PROPERTIES AND POSSIBLE APPLICATIONS.....	509
<i>Lukasz Blaszczyk</i>	
EFFECT OF TRAINING AND TEST DATASETS ON IMAGE RESTORATION AND SUPER-RESOLUTION BY DEEP LEARNING	514
<i>Ogun Kirmemis ; A. Murat Tekalp</i>	
ADVERSARIAL MACHINE LEARNING AGAINST DIGITAL WATERMARKING	519
<i>Erwin Quiring ; Konrad Rieck</i>	
EXPLAINING BLACK-BOX ANDROID MALWARE DETECTION.....	524
<i>Marco Melis ; Davide Maiorca ; Battista Biggio ; Giorgio Giacinto ; Fabio Roli</i>	
PHYSICAL LAYER COMMUNICATIONS SYSTEM DESIGN OVER-THE-AIR USING ADVERSARIAL NETWORKS.....	529
<i>Timothy J. O'shea ; Tamoghna Roy ; Nathan West ; Benjamin C. Hilburn</i>	
ADVERSARIAL MALWARE BINARIES: EVADING DEEP LEARNING FOR MALWARE DETECTION IN EXECUTABLES	533
<i>Bojan Kolosnjaji ; Ambra Demontis ; Battista Biggio ; Davide Maiorca ; Giorgio Giacinto ; Claudia Eckert ; Fabio Roli</i>	
END-TO-END PHOTOPLETH YSMOGRAPHY (PPG) BASED BIOMETRIC AUTHENTICATION BY USING CONVOLUTIONAL NEURAL NETWORKS	538
<i>Jordi Luque ; Guillem Cortès ; Carlos Segura ; Alexandre Maravilla ; Javier Esteban ; Joan Fabregat</i>	
USER INTERACTION IN MOBILE BIOMETRICS.....	543
<i>Barbara Corsetti ; Ramon Blanco-Gonzalo ; Raul Sanchez-Reillo</i>	
A REQUIREMENT ANALYSIS FOR PRIVACY PRESERVING BIOMETRICS IN VIEW OF UNIVERSAL HUMAN RIGHTS AND DATA PROTECTION REGULATION.....	548
<i>Nicholas Whiskerd ; Jana Dittmann ; Claus Vielhauer</i>	
A FRAMEWORK FOR ASSESSING FACTORS INFLUENCING USER INTERACTION FOR TOUCH-BASED BIOMETRICS	553
<i>Elakkiya Ellavarason ; Richard Guest ; Farzin Deravi</i>	

TOWARDS UNDERSTANDING THE EFFECTS OF PRACTICE ON BEHAVIOURAL BIOMETRIC RECOGNITION PERFORMANCE	558
<i>E. Haasnoot ; J.S. Barnhoorr ; L.J Spreeuwiers ; R.N.J Veldhuis ; W.B. Verwey</i>	
RECOVERY OF LINEARLY MIXED SPARSE SOURCES FROM MULTIPLE MEASUREMENT VECTORS USING L1-MINIMIZATION	563
<i>Seyyed Hamed Fouladi ; Ilangko Balasingham</i>	
FROM L1 MINIMIZATION TO ENTROPY MINIMIZATION: A NOVEL APPROACH FOR SPARSE SIGNAL RECOVERY IN COMPRESSIVE SENSING	568
<i>Miguel Heredia Conde ; Otmar Loffeld</i>	
STRUCTURED DICTIONARY LEARNING FOR COMPRESSIVE SPEECH SENSING	573
<i>Yunyun Ji ; Wei-Ping Zhu ; Benoit Champagne</i>	
GREEDY RECOVERY OF SPARSE SIGNALS WITH DYNAMICALLY VARYING SUPPORT	578
<i>Sun Hong Lim ; Jin Hyeok Yoo ; Sunwoo Kim ; Jun Won Choi</i>	
SENSING MATRIX SENSITIVITY TO RANDOM GAUSSIAN PERTURBATIONS IN COMPRESSED SENSING	583
<i>Anastasia Lavrenko ; Florian Römer ; Giovanini Del Galdo ; Reiner S. Thomä</i>	
A COLOUR HIT-OR-MISS TRANSFORM BASED ON A RANK ORDERED DISTANCE MEASURE	588
<i>Fraser Macfarlane ; Paul Murray ; Stephen Marshall ; Benjamin Perret ; Adrian Evans ; Henry White</i>	
FEATURE TRAJECTORIES SELECTION FOR VIDEO STABILIZATION	593
<i>Wilko Guilluy ; Laurent Oudre ; Azeddine Beghdadi</i>	
GRAPH SPECTRAL DOMAIN SHAPE REPRESENTATION	598
<i>Basheer Alwaely ; Charith Abhayaratne</i>	
AN ENTROPY-BASED APPROACH FOR SHAPE DESCRIPTION	603
<i>Vittoria Bruni ; Lorenzo Della Cioppa ; Domenico Vitulano</i>	
OCTONION SPARSE REPRESENTATION FOR COLOR AND MULTISPECTRAL IMAGE PROCESSING	608
<i>Srdan Lazendic ; Hendrik De Bie ; Aleksandra Pižurica</i>	
COHERENCE CONSTRAINED ALTERNATING LEAST SQUARES	613
<i>Rodrigo Cabral Farias ; José Henrique De Moraes Goulart ; Pierre Comon</i>	
A FAST EIGEN-BASED SIGNAL COMBINING ALGORITHM BY USING CORDIC	618
<i>Leiou Wang ; Donghui Wang ; Chengpeng Hao</i>	
ON THE ANGULAR RESOLUTION LIMIT UNCERTAINTY	623
<i>Maria S. Greco ; Remy Boyer ; Frank Nielsen</i>	
ASYMMETRIC SUPERCARDIOID BEAMFORMING USING CIRCULAR MICROPHONE ARRAYS	627
<i>Yaakov Buchris ; Israel Cohen ; Jacob Benesty</i>	
A NEW BEAMFORMER DESIGN METHOD FOR MULTI-GROUP MULTICASTING BY ENFORCING CONSTRUCTIVE INTERFERENCE	632
<i>Özlem Tugfe Demir ; T. Engin Tuncer</i>	
TIME MODULATED ARRAY CONTROLLED BY PERIODIC PULSED SIGNALS	637
<i>Roberto Maneiro-Catoira ; Julio Brégains ; José A. García-Naya ; Luis Castedo</i>	
EVOLUTIONARY RESAMPLING FOR MULTI-TARGET TRACKING USING PROBABILITY HYPOTHESIS DENSITY FILTER	642
<i>Mhd Modar Halimeh ; Andreas Brendel ; Walter Kellermann</i>	
SUPERPIXEL CONSTRUCTION FOR HYPERSPECTRAL UNMIXING	647
<i>Zeng Li ; Jie Chen ; Susanto Rahardja</i>	
IMPROVED ADMM-BASED ALGORITHM FOR MULTI-GROUP MULTICAST BEAMFORMING IN LARGE-SCALE ANTENNA SYSTEMS	652
<i>Özlem Tugfe Demir ; T. Engin Tuncer</i>	
FREE-WALKING 3D PEDESTRIAN LARGE TRAJECTORY RECONSTRUCTION FROM IMU SENSORS	657
<i>Haoyu Li ; Stéphane Derrode ; Lamia Benyoussef ; Wojciech Pieczynski</i>	
OPTIMAL ESTIMATION WITH EXTENDED BATTERY LIFE IN WIRELESS SENSOR NETWORKS	662
<i>Liu Yang ; Hongbin Zhu ; Haifeng Wang ; Kai Kang ; Hua Qian</i>	
AN EFFICIENT MACHINE LEARNING-BASED FALL DETECTION ALGORITHM USING LOCAL BINARY FEATURES	667
<i>Majd Saleh ; Régine Le Bouquin Jeannès</i>	
JOINT LOCALIZATION AND CLOCK OFFSET ESTIMATION VIA TIME-OF-ARRIVAL WITH RANGING OFFSET	672
<i>Ido Nevat ; François Septier ; Karin Avnit ; Gareth W. Peters ; Laurent Clavier</i>	

CASSIS: CHARACTERIZATION WITH ADAPTIVE SAMPLE- SIZE INFERENTIAL STATISTICS APPLIED TO INEXACT CIRCUITS	677
<i>Justine Bonnot ; Vincent Camus ; Karol Desnos ; Daniel Menard</i>	
BINARIZED CONVOLUTIONAL NEURAL NETWORKS FOR EFFICIENT INFERENCE ON GPUS	682
<i>Mir Khan ; Heikki Huttunen ; Jani Boutellier</i>	
ONLINE PREDICTION OF ROBOT TO HUMAN HANDOVER EVENTS USING VIBRATIONS	687
<i>Harmeet Singh ; Marco Controzzi ; Christian Cipriani ; Gaetano Di Caterina ; Lykourgos Petropoulakis ; John Soraghan</i>	
FUNDAMENTAL LIMITS FOR JOINT RELATIVE POSITION AND ORIENTATION ESTIMATION WITH GENERIC ANTENNAS	692
<i>Robert Pohlmann ; Siwei Zhang ; Armin Dammann ; Peter A. Hoeher</i>	
VISUAL LOCALIZATION IN THE PRESENCE OF APPEARANCE CHANGES USING THE PARTIAL ORDER KERNEL	697
<i>Maryam Abdollahyan ; Silvia Cascianelli ; Enrico Bellocchio ; Gabriele Costante ; Thomas A. Ciarfuglia ; Francesco Bianconi ; Fabrizio Smeraldi ; Mario L. Fravolini</i>	
ROBOTIC MOBILITY DIVERSITY ALGORITHM WITH CONTINUOUS SEARCH SPACE	702
<i>Daniel Bonilla Licea ; Des Mclernon ; Mounir Ghogho ; Edmond Nurellari ; Syed Ali Raza Zaidi</i>	
DATA-SELECTIVE CONJUGATE GRADIENT ALGORITHM	707
<i>Paulo S.R. Diniz ; Marcele O.K. Mendonca ; Jonathas O. Ferreira ; Tadeu N. Ferreira</i>	
SPARSE PHASE RETRIEVAL VIA ITERATIVELY REWEIGHTED AMPLITUDE FLOW	712
<i>Gang Wang ; Liang Zhang ; Georgios B. Giannakis ; Jie Chen</i>	
SPARSE TIME-FREQUENCY-FREQUENCY-RATE REPRESENTATION FOR MULTICOMPONENT NONSTATIONARY SIGNAL ANALYSIS	717
<i>Wenpeng Zhang ; Yaowen Fu ; Yuanyuan Li</i>	
ON THE TIME-FREQUENCY REASSIGNMENT OF INTERFERING MODES IN MULTICOMPONENT FM SIGNALS	722
<i>Vittoria Bruni ; Michela Tartaglione ; Domenico Vitulano</i>	
ON CYCLOSTATIONARITY-BASED SIGNAL DETECTION	727
<i>Antonio Napolitano</i>	
FASTER FISTA	732
<i>Jingwei Liang ; Carola-Bibiane Schönlieb</i>	
A PLUG AND PLAY BAYESIAN ALGORITHM FOR SOLVING MYOPE INVERSE PROBLEMS	737
<i>Lotfi Chaari ; Jean-Yves Tournet ; Hadj Batatia</i>	
LINEAR CONVERGENCE OF STOCHASTIC BLOCK-COORDINATE FIXED POINT ALGORITHMS	742
<i>Patrick L. Combettes ; Jean-Christophe Pesquet</i>	
BAYESIAN RESTORATION OF HIGH-DIMENSIONAL PHOTON-STARVED IMAGES	747
<i>J. Tachella ; Y. Altmann ; M. Pereyra ; S. McLaughlin ; J. -Y. Tournet</i>	
AN EXTENSION OF AVERAGED-OPERATOR-BASED ALGORITHMS	752
<i>Miguel Simões ; José Bioucas-Dias ; Luis B. Almeida</i>	
CONVOLUTIONAL NEURAL NETWORKS FOR HEART SOUND SEGMENTATION	757
<i>Francesco Renna ; Jorge Oliveira ; Miguel T. Coimbra</i>	
ESTIMATION OF MISSING DATA IN FETAL HEART RATE SIGNALS USING SHIFT-INVARIANT DICTIONARY	762
<i>Faraz Barzideh ; Jarle Urdal ; Kidanto Hussein ; Kjersti Engan ; Karl Skretting ; Paschal Mdoe ; Benjamin Kamala ; Sara Brunner</i>	
SENSITIVITY OF THE CONTACTLESS VIDEOPLETHYSMOGRAPHY-BASED HEART RATE DETECTION TO DIFFERENT MEASUREMENT CONDITIONS	767
<i>Ennio Gambi ; Manola Ricciuti ; Susanna Spinsante</i>	
REPOBIT: CLOUD-DRIVEN REAL-TIME BIOSIGNAL STREAMING, STORAGE, VISUALISATION AND SHARING	772
<i>Margarida Reis ; Hugo Plácido Da Silva</i>	
AN EFFICIENT LOSSLESS COMPRESSION ALGORITHM FOR ELECTROCARDIOGRAM SIGNALS	777
<i>Giuseppe Campobello ; Antonino Segreto ; Sarah Zanafi ; Salvatore Serrano</i>	
DYNAMIC ALLOCATION OF PROCESSING RESOURCES IN CLOUD-RAN FOR A VIRTUALISED 5G MOBILE NETWORK	782
<i>Yi Zhang ; Federico Barusso ; Diarmuid Collins ; Marco Ruffini ; Luiz A. Dasilva</i>	
NETWORK UTILITY MAXIMIZATION FOR ADAPTIVE RESOURCE ALLOCATION IN DSL SYSTEMS	787
<i>Jeroen Verdyck ; Chris Blondia ; Marc Moonen</i>	

PROACTIVE COMPUTATION CACHING POLICIES FOR 5G-AND-BEYOND MOBILE EDGE CLOUD NETWORKS	792
<i>Nicola Di Pietro ; Emilio Calvanese Strinati</i>	
JOINT OPTIMIZATION OF CACHING AND TRANSPORT IN PROACTIVE EDGE CLOUD	797
<i>Stefania Sardellitti ; Francesca Costanzo ; Mattia Merluzzi</i>	
CROSS-LAYER OPTIMIZATION IN TERMINALS	802
<i>Valerio Frascolla ; Jonathan Ah Sue ; Muhammad Mudussir Ayub ; Krzysztof Miesniak ; Ralph Hasholzner ; Jürgen Englisch ; Amal Ben-Ameur</i>	
PERFORMANCE OF A THIRD-ORDER VOLTERRA MVDR BEAMFORMER IN THE PRESENCE OF NON-GAUSSIAN AND/OR NON-CIRCULAR INTERFERENCE	807
<i>Pascal Chevalier ; Jean Pierre Delmas ; Mustapha Sadok</i>	
HYBRID ANALOG-DIGITAL PRECODING FOR INTERFERENCE EXPLOITATION (INVITED PAPER)	812
<i>Ang Li ; Christos Masouros ; Fan Liu</i>	
INTERFERENCE-BASED CLUSTERING FOR MIMO D2D UNDERLAY COMMUNICATIONS	817
<i>Mylene Pischella ; Berna Ozbek ; Didier Le Ruyet</i>	
TWO-STEP HYBRID MULTIUSER EQUALIZER FOR SUB-CONNECTED MMWAVE MASSIVE MIMO SC-FDMA SYSTEMS	822
<i>R. Magueta ; D. Castanheira ; A. Silva ; R. Dinis ; A. Gameiro</i>	
SEQUENTIAL SPATIA-TEMPORAL SYMBOL-LEVEL PRECODING ENABLING FASTER-THAN-NYQUIST SIGNALING FOR MULTI-USER MISO SYSTEMS	827
<i>Daniilo Spano ; Symeon Chatzinotas ; Björn Ottersten</i>	
HOW MUCH WILL TINY IOT NODES PROFIT FROM MASSIVE BASE STATION ARRAYS?	832
<i>Ema Becirovic ; Emil Björnson ; Erik G. Larsson</i>	
A LAYER-WISE SCORE LEVEL ENSEMBLE FRAMEWORK FOR ACOUSTIC SCENE CLASSIFICATION	837
<i>Arshdeep Singh ; Anshul Thakur ; Padmanabhan Rajan ; Arnav Bhavsar</i>	
DIARIZATION AND SEPARATION BASED ON A DATA-DRIVEN SIMPLEX	842
<i>Bracha Laufer-Goldshtein ; Ronen Talmon ; Sharon Gannot</i>	
MODELLING OF SOUND EVENTS WITH HIDDEN IMBALANCES BASED ON CLUSTERING AND SEPARATE SUB-DICTIONARY LEARNING	847
<i>Chaitanya Narisetty ; Tatsuya Komatsu ; Reishi Kondo</i>	
CONNECTIONIST TEMPORAL CLASSIFICATION-BASED SOUND EVENT ENCODER FOR CONVERTING SOUND EVENTS INTO ONOMATOPOEIC REPRESENTATIONS	852
<i>Koichi Miyazaki ; Tomoki Hayashi ; Tomoki Toda ; Kazuya Takeda</i>	
MULTI-CHANNEL NON-NEGATIVE MATRIX FACTORIZATION FOR OVERLAPPED ACOUSTIC EVENT DETECTION	857
<i>Panagiotis Giannoulis ; Gerasimos Potamianos ; Petros Maragos</i>	
ACOUSTIC SCENE CLASSIFICATION FROM FEW EXAMPLES	862
<i>Ivan Bocharov ; Tjalling Tjalkens ; Bert De Vries</i>	
GRAPH-BASED INPAINTING OF DISOCCLUSION HOLES FOR ZOOMING IN 3D SCENES	867
<i>Pinar Akyazi ; Pascal Frossard</i>	
IMPROVING GRAPH CONVOLUTIONAL NETWORKS WITH NON-PARAMETRIC ACTIVATION FUNCTIONS	872
<i>Simone Scardapane ; Steven Van Vaerenbergh ; Danilo Commiello ; Aurelio Uncini</i>	
GRAPH SIMILARITY BASED ON GRAPH FOURIER DISTANCES	877
<i>Eva Lagunas ; Antonio G. Marques ; Symeon Chatzinotas ; Björn Ottersten</i>	
GRAPH REPRESENTATION USING MUTUAL INFORMATION FOR GRAPH MODEL DISCRIMINATION	882
<i>Francisco Hawas ; Petar M. Djuric</i>	
FUSION OF COMMUNITY STRUCTURES IN MULTIPLEX NETWORKS BY LABEL CONSTRAINTS	887
<i>Yuming Huang ; Ashkan Panahi ; Hamid Krim ; Liyi Dai</i>	
SAMPLING AND RECONSTRUCTION OF BAND-LIMITED GRAPH SIGNALS USING GRAPH SYNDROMES	892
<i>A Anil Kumar ; N Narendra ; M Girish Chandra ; Kriti Kumar</i>	
RATE DISTORTION OPTIMIZED GRAPH PARTITIONING FOR OMNIDIRECTIONAL IMAGE CODING	897
<i>Mira Rizkallah ; Francesca De Simone ; Thomas Maugey ; Christine Guillemot ; Pascal Frossard</i>	
ESTIMATION OF BANDLIMITED SIGNALS ON GRAPHS FROM SINGLE BIT RECORDINGS OF NOISY SAMPLES	902
<i>Mohak Goyal ; Animesh Kumar</i>	

JOINT GRAPH LEARNING AND SIGNAL RECOVERY VIA KALMAN FILTER FOR MULTIVARIATE AUTO-REGRESSIVE PROCESSES	907
<i>Mahmoud Ramezani-Mayiami</i>	
SAMPLING PHASE ESTIMATION IN UNDERWATER PPM FRACTIONALLY SAMPLED EQUALIZATION.....	912
<i>Gaetano Scarano ; Andrea Petroni ; Roberto Cusani ; Mauro Biagi</i>	
ON PARTIAL RESPONSE SIGNALING FOR MIMO EQUALIZATION ON MULTI-GBIT/S ELECTRICAL INTERCONNECTS	917
<i>Lennert Jacobs ; Jelle Bailleul ; Paolo Manfredi ; Mamoun Guenach ; Dries Vande Ginste ; Marc Moeneclaey</i>	
LOW-RANK CHANNEL AND INTERFERENCE ESTIMATION IN MM- WAVE MASSIVE ANTENNA ARRAYS.....	922
<i>G. Soatti ; A. Murtada ; M. Nicoli ; J. Gambini ; U. Spagnolini</i>	
1-BIT MASSIVE MIMO DOWNLINK BASED ON CONSTRUCTIVE INTERFERENCE.....	927
<i>Ang Li ; Christos Masouros ; A. Lee Swindlehurst</i>	
ITERATIVE EQUALIZATION BASED ON EXPECTATION PROPAGATION: A FREQUENCY DOMAIN APPROACH.....	932
<i>Serdar Sahin ; Antonio M. Cipriano ; Charly Poulliat ; Marie-Laure Boucheret</i>	
JOINT LONG-TERM ADMISSION CONTROL AND BEAMFORMING IN DOWNLINK MISO NETWORKS.....	937
<i>Jingran Lin ; Qiang Li ; Mengyuan Ma</i>	
REBROADCAST ATTACKS: DEFENSES, REATTACKS, AND REDEFENSES.....	942
<i>Wei Fan ; Shruti Agarwal ; Hany Farid</i>	
DETECTING ADVERSARIAL EXAMPLES - A LESSON FROM MULTIMEDIA SECURITY	947
<i>Pascal Schötle ; Alexander Schlögl ; Cecilia Pasquini ; Rainer Böhme</i>	
ANTI-FORENSICS OF JPEG COMPRESSION USING GENERATIVE ADVERSARIAL NETWORKS.....	952
<i>Yingmin Luo ; Hanqi Zi ; Qiong Zhang ; Xiangui Kang</i>	
FOOLING PRNU-BASED DETECTORS THROUGH CONVOLUTIONAL NEURAL NETWORKS	957
<i>Nicolò Bonettini ; Luca Bondi ; Sara Mandelli ; Paolo Bestagini ; Stefano Tubaro ; David Güera</i>	
ADVERSARIAL MULTIMEDIA FORENSICS: OVERVIEW AND CHALLENGES AHEAD.....	962
<i>Mauro Barni ; Matthew C. Stamm ; Benedetta Tondi</i>	
ANALYSIS OF ADVERSARIAL ATTACKS AGAINST CNN-BASED IMAGE FORGERY DETECTORS	967
<i>Diego Gragnaniello ; Francesco Marra ; Giovanni Poggi ; Luisa Verdoliva</i>	
ACOUSTIC EVENT CLASSIFICATION USING MULTI-RESOLUTION HMM	972
<i>Paul M. Baggenstoss</i>	
A FUSION OF DEEP CONVOLUTIONAL GENERATIVE ADVERSARIAL NETWORKS AND SEQUENCE TO SEQUENCE AUTOENCODERS FOR ACOUSTIC SCENE CLASSIFICATION	977
<i>Shahin Arniriparian ; Michael Freitag ; Nicholas Cummins ; Maurice Gerczuk ; Sergey Pugachevskiy ; Björn Schuller</i>	
ON ROOM IMPULSE RESPONSE MEASUREMENT USING PERFECT SEQUENCES FOR WIENER NONLINEAR FILTERS	982
<i>A. Carini ; S. Cecchi ; A. Terenzi ; S. Orcioni</i>	
BEAMFORMING-BASED ACOUSTIC SOURCE LOCALIZATION AND ENHANCEMENT FOR MULTIROTOR UAVS	987
<i>Daniele Salvati ; Carlo Drioli ; Giovanni Ferrin ; Gian Luca Foresti</i>	
INFANT CRY DETECTION IN ADVERSE ACOUSTIC ENVIRONMENTS BY USING DEEP NEURAL NETWORKS.....	992
<i>Daniele Ferretti ; Marco Severini ; Emanuele Principi ; Annalisa Cenci ; Stefano Squartini</i>	
A CNN-GRU APPROACH TO CAPTURE TIME-FREQUENCY PATTERN INTERDEPENDENCE FOR SNORE SOUND CLASSIFICATION	997
<i>Jianhong Wang ; Harald Strömfeli ; Bjorn W. Schuller</i>	
REDUCING THE FALSE ALARM RATE FOR FACE MORPH DETECTION BY A MORPH PIPELINE FOOTPRINT DETECTOR.....	1002
<i>Tom Neubert ; Christian Kraetzer ; Jana Dittmann</i>	
AUTOMATIC DETECTION OF IMAGE MORPHING BY TOPOLOGY-BASED ANALYSIS.....	1007
<i>Sabah Jassim ; Aras Asaad</i>	
MORPHING DETECTION USING A GENERAL- PURPOSE FACE RECOGNITION SYSTEM	1012
<i>Lukasz Wandzik ; Gerald Kaeding ; Raul Vicente Garcia</i>	
AN OVERVIEW OF RECENT ADVANCES IN ASSESSING AND MITIGATING THE FACE MORPHING ATTACK	1017
<i>Andrey Makrushin ; Andreas Wolf</i>	

REFLECTION ANALYSIS FOR FACE MORPHING ATTACK DETECTION	1022
<i>Clemens Seibold ; Anna Hilsmann ; Peter Eisert</i>	
TOWARDS ROBUST EVALUATION OF FACE MORPHING DETECTION	1027
<i>Luuk Spreuwers ; Maikel Schils ; Raymond Veldhuis</i>	
FAST MULTI-LANE DETECTION AND MODELING FOR EMBEDDED PLATFORMS	1032
<i>Marcos Nieto ; Lorena Garcia ; Orti Scnderos ; Oihana Otaegui</i>	
THE ROLE OF CLOUD-COMPUTING IN THE DEVELOPMENT AND APPLICATION OF ADAS	1037
<i>Cristian Olariu ; Juan Diego Ortega ; J. Javier Yebe</i>	
BAYESIAN TRACK-TO-GRAPH ASSOCIATION FOR MARITIME TRAFFIC MONITORING	1042
<i>Raffaele Grasso ; Leonardo M. Millefiori ; Paolo Braca</i>	
AUTONOMOUS PERSON DETECTION AND TRACKING FRAMEWORK USING UNMANNED AERIAL VEHICLES (UAVS)	1047
<i>Hajer Fradi ; Lorenzo Bracco ; Flavia Canino ; Jean-Luc Dugelay</i>	
A RESIDUAL ENCODER-DECODER NETWORK FOR SEMANTIC SEGMENTATION IN AUTONOMOUS DRIVING SCENARIOS	1052
<i>Y.G Nareh ; Suzanne Little ; Noel E. O'connor</i>	
TRANSFORMED LOCALLY LINEAR MANIFOLD CLUSTERING	1057
<i>Jyoti Maggu ; Angshul Majumdar ; Emilie Chouzenoux</i>	
JACOBI ALGORITHM FOR NONNEGATIVE MATRIX FACTORIZATION WITH TRANSFORM LEARNING	1062
<i>Herwig Wendt ; Dylan Fagot ; Cédric Févotte</i>	
COUPLED AUTOENCODER BASED RECONSTRUCTION OF IMAGES FROM COMPRESSIVELY SAMPLED MEASUREMENTS	1067
<i>Kavya Gupta ; Broieshwar Bhowmick</i>	
GRAPH STRUCTURED DICTIONARY FOR REGRESSION	1072
<i>Kriti Kumar ; M Girish Chandra ; Aakanksha Bapna ; A Anil Kumar</i>	
SPARSE MULTIPLE KERNEL LEARNING: SUPPORT IDENTIFICATION VIA MIRROR STRATIFIABILITY	1077
<i>Guillaume Garrigos ; Lorenzo Rosasco ; Silvia Villa</i>	
COMPLETE MODEL SELECTION IN MULTISSET CANONICAL CORRELATION ANALYSIS	1082
<i>Tim Marrinan ; Tanui Hasija ; Christian Lameiro ; Peter J. Schreier</i>	
THEORETICAL STUDY OF MULTISCALE PERMUTATION ENTROPY ON FINITE-LENGTH FRACTIONAL GAUSSIAN NOISE	1087
<i>Antonio Dávalos ; Meryem Jabloun ; Philippe Ravier ; Olivieri Butelli</i>	
EMOTION ESTIMATION IN CROWDS: THE INTERPLAY OF MOTIVATIONS AND EXPECTATIONS IN INDIVIDUAL EMOTIONS	1092
<i>Oscar J. Urizar ; Lucio Marcenaro ; Carlo S. Regazzoni ; Emilia I. Barakova ; Matthias Rauterberg</i>	
ROBUST DETECTION AND ESTIMATION OF CHANGE-POINTS IN A TIME SERIES OF MULTIVARIATE IMAGES	1097
<i>Ammar Mian ; Jean-Phillipe Ovarlez ; Guillaume Ginolhac ; Abdourahmane Atto</i>	
ON THE DETECTION OF LOW RANK MATRICES IN THE HIGH-DIMENSIONAL REGIME	1102
<i>Antoine Chevreuil ; Philippe Loubaton</i>	
IMPROVING PORTFOLIOS GLOBAL PERFORMANCE WITH ROBUST COVARIANCE MATRIX ESTIMATION: APPLICATION TO THE MAXIMUM VARIETY PORTFOLIO	1107
<i>Emmanuelle Jay ; Eugénie Terreaux ; Jean-Philippe Ovarlez ; Frédéric Pascal</i>	
RANGE ESTIMATION FROM SINGLE-PHOTON LIDAR DATA USING A STOCHASTIC EM APPROACH	1112
<i>Yoann Altmann ; Stephen Mclaughlin</i>	
MODELING TIME OF ARRIVAL PROBABILITY DISTRIBUTION AND TDOA BIAS IN ACOUSTIC EMISSION TESTING	1117
<i>Carlos A. Prete Junior ; Vítor H. Nascimento ; Cássie G. Lopes</i>	
A FACTORIZATION APPROACH TO SMOOTHING OF HIDDEN RECIPROCAL MODELS	1122
<i>Francesca Paola Carli ; Anna Caterina Carli</i>	
COMPUTATIONAL DIAGNOSIS OF PARKINSON'S DISEASE FROM SPEECH BASED ON REGULARIZATION METHODS	1127
<i>Yolanda Camnos-Roca ; Fernando Calle-Alonso ; Carlos J. Perez ; Lizbeth Naranjo</i>	
OBSTRUCTIVE SLEEP APNEA (OSA) CLASSIFICATION USING ANALYSIS OF BREATHING SOUNDS DURING SPEECH	1132
<i>Ruby M. Simply ; Eliran Dafna ; Yaniv Zigel</i>	

PIPELINE COMPARISON FOR THE PRE-PROCESSING OF RESTING-STATE DATA IN EPILEPSY	1137
<i>Bianca De Blasi ; Matthias Koepp ; Haria Boscolo Galazzo ; Anna Barnes ; Luca Pasetto ; Gloria Menezaz ; Silvia Francesca Storti</i>	
CLASSIFICATION BETWEEN ABNORMAL AND NORMAL RESPIRATION THROUGH OBSERVATION RATE OF HEART SOUNDS WITHIN LUNG SOUNDS	1142
<i>Kimitake Ohkawa ; Masaru Yamashita ; Shoichi Matsunaga</i>	
ASSESSING TISSUE HETEROGENEITY BY NON-GAUSSIAN MEASURES IN A PERMEABLE ENVIRONMENT	1147
<i>Lorenza Brusini ; Gloria Menegaz ; Markus Nilsson</i>	
RECURRENT NEURAL NETWORKS WITH WEIGHTING LOSS FOR EARLY PREDICTION OF HAND MOVEMENTS	1152
<i>Philipp Koch ; Huy Phan ; Marco Maass ; Fabrice Katzberg ; Radoslaw Mazur ; Alfred Mertins</i>	
DEEP NEUROEVOLUTION: TRAINING DEEP NEURAL NETWORKS FOR FALSE ALARM DETECTION IN INTENSIVE CARE UNITS	1157
<i>Oroojeni M. J. Hooman ; Mohammad Majid Al-Rifaie ; Mihalix A. Nicolaou</i>	
A DATA DRIVEN EMPIRICAL ITERATIVE ALGORITHM FOR GSR SIGNAL PRE-PROCESSING	1162
<i>Arvind Gautam ; Neide Simoes-Capela ; Giuseppina Schiavone ; Amit Acharyya ; Walter De Raedt ; Chris Van Hoof</i>	
IMPROVED PROTEIN RESIDUE-RESIDUE CONTACT PREDICTION USING IMAGE DENOISING METHODS	1167
<i>Amelia Villegas-Morcillo ; Juan A. Morales-Cordovilla ; Angel M. Gomez ; Victoria Sanchez</i>	
DESIGN OF OPTIMAL FREQUENCY-SELECTIVE FIR FILTERS USING A MEMETIC ALGORITHM	1172
<i>Luis M. San-José-Revuelta</i>	
METAGENOMIC COMPOSITION ANALYSIS OF SEDIMENTARY ANCIENT DNA FROM THE ISLE OF WIGHT	1177
<i>Diogo Pratas ; Armando J. Pinho</i>	
A NEW ASYMMETRIC LINK-BASED BINARY REGRESSION MODEL TO DETECT PARKINSON'S DISEASE BY USING REPLICATED VOICE RECORDINGS	1182
<i>Naranjo Lizbeth ; Carlos J. Pérez ; Jacinto Martín ; Fernando Calle-Alonso</i>	
SPECTRAL CLUSTERING WITH AUTOMATIC CLUSTER-NUMBER IDENTIFICATION VIA FINDING SPARSE EIGENVECTORS	1187
<i>Yuto Ogino ; Masahiro Yukawa</i>	
SEMI-SUPERVISED LEARNING FOR DYNAMIC MODELING OF BRAIN SIGNALS DURING VISUAL AND AUDITORY TESTS	1192
<i>Gonzalo Safont ; Addisson Salazar ; Jordi Belda ; Luis Vergara</i>	
ACTIVE LEARNING FOR ONE-CLASS CLASSIFICATION USING TWO ONE-CLASS CLASSIFIERS	1197
<i>Patrick Schlachter ; Bin Yang</i>	
MULTISCALE DCNN ENSEMBLE APPLIED TO HUMAN ACTIVITY RECOGNITION BASED ON WEARABLE SENSORS	1202
<i>Jessica Sena ; Jesimon Barreto Santos ; William Robson Schwartz</i>	
NEW DOPPLER PROCESSING FOR THE DETECTION OF SMALL AND SLOWLY-MOVING TARGETS IN HIGHLY AMBIGUOUS RADAR CONTEXT	1207
<i>Linda Aouchiche ; Laurent Ferro-Famil ; Claude Adnet</i>	
RESOLUTION ENHANCEMENT AND INTERFERENCE SUPPRESSION FOR PLANETARY RADAR SOUNDERS	1212
<i>Maria Carmela Raguso ; Lorenzo Piazzo ; Marco Mastrogiuseppe ; Roberto Seu ; Roberto Orosei</i>	
ECA FILTER EFFECTS ON GROUND CLUTTER STATISTICS IN DVB- T BASED PASSIVE RADAR	1217
<i>Nerea Del-Rey-Maestre ; María-Pilar Jarabo-Amores ; José-Luis Bárcena-Humanes ; David Mata-Moya ; Pedro Gómez-Del-Hoyo</i>	
EFFICIENT INVERSE SCATTERING ALGORITHM BY INCORPORATING RPM METHOD FOR MICROWAVE NON-DESTRUCTIVE IMAGING	1222
<i>Shuto Takahashi ; Shouhei Kidera</i>	
SHORT-DURATION DOPPLER SPECTROGRAM FOR PERSON RECOGNITION WITH A HANDHELD RADAR	1227
<i>Michael Ulrich ; Bin Yang</i>	

NONUNITARY JOINT DIAGONALIZATION FOR OVERDETERMINED CONVOLUTIVE BLIND SIGNAL SEPARATION	1232
<i>Wei-Tao Zhang ; Jin-Ling Sun</i>	
DIRECTION-OF-ARRIVAL ESTIMATION FOR UNIFORM RECTANGULAR ARRAY: A MULTILINEAR PROJECTION APPROACH.....	1237
<i>Ming-Yang Cao ; Xingpeng Mao ; Xiaozhuan Long ; Lei Huang</i>	
A BAYESIAN BLIND SOURCE SEPARATION METHOD FOR A LINEAR-QUADRATIC MODEL.....	1242
<i>Stéphanie Madrolle ; Leonardo T. Duarte ; Pierre Grangeat ; Christian Jutten</i>	
EFFICIENT AND STABLE JOINT EIGENVALUE DECOMPOSITION BASED ON GENERALIZED GIVENS ROTATIONS.....	1247
<i>Mesloub Ammar ; Belouchrani Adel ; Abed-Meraim Karim</i>	
IDENTIFICATION OF MULTICHANNEL AR MODELS WITH ADDITIVE NOISE: A FRISCH SCHEME APPROACH	1252
<i>Roberto Diversi</i>	
ARBITRARY LENGTH PERFECT INTEGER SEQUENCES USING GEOMETRIC SERIES	1257
<i>Soo-Chang Pei ; Kuo-Wei Chang</i>	
DECISION STATISTICS FOR NONCOHERENT SIGNAL DETECTION IN MULTI-ELEMENT ANTENNA ARRAYS.....	1262
<i>Olesya Bolkhovskaya ; Alexander Maltsev</i>	
PERFORMANCE BOUNDS ANALYSIS FOR SEMI-BLIND CHANNEL ESTIMATION WITH PILOT CONTAMINATION IN MASSIVE MIMO-OFDM SYSTEMS	1267
<i>Ouahbi Rekik ; Abdelhamid Ladaycia ; Karim Abed-Meraim ; Anissa Mokraoui</i>	
PERFORMANCE ANALYSIS OF UPLINK MASSIVE MIMO SYSTEM OVER RICIAN FADING CHANNEL	1272
<i>Amare Kassaw ; Dereie Hailemariam ; A. M. Zoubir</i>	
OPTIMAL SWIPT BEAMFORMING FOR MISO INTERFERING BROADCAST CHANNELS WITH MULTI - TYPE RECEIVERS	1277
<i>Qiang Li ; Jingran Lin</i>	
EFFICIENT SEMI-BLIND SUBSPACE CHANNEL ESTIMATION FOR MIMO-OFDM SYSTEM.....	1282
<i>Abdelhamid Ladaycia ; Karim Abed-Meraim ; Anissa Mokraoui ; Adel Belouchrani</i>	
A FREQUENCY-DOMAIN BAND-MMSE EQUALIZER FOR CONTINUOUS PHASE MODULATION OVER FREQUENCY-SELECTIVE TIME-VARYING CHANNELS.....	1287
<i>R. Chayot ; N. Thomas ; C. Poulliat ; M.-L. Boucheret ; G. Lesthievant ; N. Van Wambeke</i>	
DQLC OPTIMIZATION FOR JOINT SOURCE CHANNEL CODING OF CORRELATED SOURCES OVER FADING MAC.....	1292
<i>P. Suárez-Casal ; O. Fresnedo ; L. Castedo</i>	
CHANNEL ESTIMATION BASED ON THE DISCRETE COSINE TRANSFORM TYPE-III EVEN	1297
<i>María Elena Domínguez-Jiménez ; David Luengo ; Gabriela Sansigre-Vidal</i>	
AN ENHANCED INTERLEAVING FRAME LOSS CONCEALMENT METHOD FOR VOICE OVER IP NETWORK SERVICES.....	1302
<i>Tarek Gueham ; Fatima Merazka</i>	
CHARACTERIZING 3D SHAPES: A COMPLEX NETWORK-BASED APPROACH	1307
<i>Gabriel Eduardo Da Silva ; André R. Backes</i>	
TEXTURE CLASSIFICATION USING FRACTAL DIMENSION IMPROVED BY LOCAL BINARY PATTERNS	1312
<i>André R. Backes ; Jarbas Joaci De Mesquita Sá</i>	
CONVOLUTIONAL NEURAL NETWORKS WITHOUT ANY CHECKERBOARD ARTIFACTS.....	1317
<i>Yusuke Sugawara ; Sayaka Shiota ; Hitoshi Kiya</i>	
A HOLISTIC AUTOMATIC METHOD FOR GROUPING FACIAL FEATURES BASED ON THEIR APPEARANCE.....	1322
<i>Felix Fuentes-Hurtado ; Jose Antonio Diego-Mas ; Valery Naranjo ; Mariano Alcañiz</i>	
SPACE ALTERNATING VARIATIONAL BAYESIAN LEARNING FOR LMMSE FILTERING	1327
<i>Christo Kurisumoottil Thomas ; Dirk Slock</i>	
NEW RESULTS ON LMVDR ESTIMATORS FOR LDSS MODELS.....	1332
<i>Eric Chaumette ; Francois Vincent ; Benoit Priot ; Gael Pages ; Arnaud Dion</i>	
NUMERICAL STABILITY OF SPLINE-BASED GABOR-LIKE SYSTEMS	1337
<i>Darian M. Onchis ; Simone Zappalà ; Pedro Real ; Codruta Istin</i>	
BAYESIAN TARGET ENUMERATION AND LABELING USING RADAR DATA OF HUMAN GAIT.....	1342
<i>Freweyni K. Teklehaymanot ; Ann-Kathrin Seifert ; Michael Muma ; Moeness G. Amin ; Abdelhak M. Zoubir</i>	

MULTIFRACTAL CHARACTERIZATION FOR BIVARIATE DATA	1347
<i>R. Leonarduzzi ; P. Abry ; S. Roux ; H. Wendt ; S. Jaffard ; S. Seuret</i>	
PUTTING THE PRNU MODEL IN REVERSE GEAR: FINDINGS WITH SYNTHETIC SIGNALS	1352
<i>Miguel Mascicpinto ; Fernando Perez-Gonzalez</i>	
PRNU-BASED IMAGE CLASSIFICATION OF ORIGIN SOCIAL NETWORK WITH CNN	1357
<i>Roberto Caldelli ; Irene Amerini ; Chang Tsun Li</i>	
BLIND DETECTION AND LOCALIZATION OF VIDEO TEMPORAL SPLICING EXPLOITING SENSOR-BASED FOOTPRINTS	1362
<i>Sara Mandelli ; Paolo Bestagini ; Stefano Tubaro ; Davide Cozzolino ; Luisa Verdoliva</i>	
EXTRACTING PRNU NOISE FROM H.264 CODED VIDEOS	1367
<i>Enes Altinisik ; Kasim Tasdemir ; Husrev Taha Sencar</i>	
CAMERA-BASED IMAGE FORGERY LOCALIZATION USING CONVOLUTIONAL NEURAL NETWORKS.....	1372
<i>Davide Cozzolino ; Luisa Verdoliva</i>	
CHARACTERIZATION OF MENTAL STATES THROUGH NODE CONNECTIVITY BETWEEN BRAIN SIGNALS	1377
<i>Tiziana Cattai ; Stefania Colonnese ; Marie-Constance Corsi ; Danielle S. Bassett ; Gaetano Scarano ; Fabrizio De Vico Fallani</i>	
ON THE MOST INFORMATIVE SLICE OF BICOHERENCE THAT CHARACTERIZES RESTING STATE BRAIN CONNECTIVITY	1382
<i>Ahmet Levent Kandemir ; Tolga Esat Özkurt</i>	
AN EMPIRICAL EVALUATION OF SHORT-TERM MEMORY RETENTION USING DIFFERENT HIGH-DENSITY EEG BASED BRAIN CONNECTIVITY MEASURES	1387
<i>Ronnie Daniel ; Vishal Pandey ; K Raghav Bhat ; Akash K Rao ; Ram Singh ; Sushil Chandra</i>	
CONNECTIVITY MODULATIONS INDUCED BY REACHING&GRASPING MOVEMENTS	1392
<i>Silvia Francesca Storti ; Ilaria Boscolo Galazzo ; Chiara Iacovelli ; Pietro Caliandro ; Gloria Menegaz</i>	
SCALE-FREE FUNCTIONAL CONNECTIVITY ANALYSIS FROM SOURCE RECONSTRUCTED MEG DATA	1397
<i>D. La Rocca ; P. Ciuciu ; V. Van Wassenhove ; H. Wendt ; P. Abry ; R. Leonarduzzi</i>	
P-SCORE: PERFORMANCE ALIGNED NORMALIZATION AND AN EVALUATION IN SCORE- LEVEL MULTI-BIOMETRIC FUSION	1402
<i>Naser Damer ; Fadi Boutros ; Philipp Terhörst ; Andreas Braun ; Arjan Kuijper</i>	
EAR ACOUSTIC BIOMETRICS USING INAUDIBLE SIGNALS AND ITS APPLICATION TO CONTINUOUS USER AUTHENTICATION.....	1407
<i>Shivangi Mahto ; Takayuki Arakawa ; Takafumi Koshinaka</i>	
IMPROVED PAIRWISE EMBEDDING FOR HIGH-FIDELITY REVERSIBLE DATA HIDING	1412
<i>Ioan Catalin Dragoi ; Dinu Coltuc</i>	
ACTIVE CONTENT FINGERPRINTING USING LATENT DATA REPRESENTATION, EXTRACTOR AND RECONSTRUCTOR.....	1417
<i>Dimche Kostadinov ; Sviatoslav Voloshynovskiy ; Sohrab Ferdowsi</i>	
QUANTITATIVE AND BINARY STEGANALYSIS IN JPEG: A COMPARATIVE STUDY	1422
<i>Ahmad Zakaria ; Marc Chaumont ; Gérard Subsol</i>	
PHYLOGENETIC ANALYSIS OF MULTIMEDIA CODEC SOFTWARE	1427
<i>Sebastiano Verde ; Simone Milani ; Giancarlo Calvagno</i>	
NON-INTRUSIVE FINGERPRINTS EXTRACTION FROM HYPERSPECTRAL IMAGERY	1432
<i>Longbin Yan ; Jie Chen</i>	
PERFORMANCE EVALUATION OF N O- REFERENCE IMAGE QUALITY METRICS FOR VISIBLE WAVELENGTH IRIS BIOMETRIC IMAGES	1437
<i>Xinwei Liu ; Christophe Charrier ; Marius Pedersen ; Patrick Bours</i>	
IMPACTS OF VIEWING CONDITIONS ON HDR-VDP2	1442
<i>Maxime Rousselot ; Éric Auffret ; Xavier Ducloux ; Olivier Le Meur ; Rémi Cozot</i>	
INFORMATION FUSION BASED QUALITY ENHANCEMENT FOR 3D STEREO IMAGES USING CNN	1447
<i>Zhi Jin ; Haili Luo ; Lei Luo ; Wenbin Zou ; Xia Lil ; Eckehard Steinbach</i>	
A BLIND IMAGE QUALITY METRIC USING A SELECTION OF RELEVANT PATCHES BASED ON CONVOLUTIONAL NEURAL NETWORK	1452
<i>Aladine Chetouani</i>	
COLORBLIND-FRIENDLY HALFTONING	1457
<i>S.K. Felix Yu ; Yuk-Hee Chan ; P.K. Daniel Lun ; Chi Wang Jeffrey Chan ; Kai Wang Kenneth Li</i>	
DIRECTION OF ARRIVAL ESTIMATION FOR MULTIPLE SOUND SOURCES USING CONVOLUTIONAL RECURRENT NEURAL NETWORK	1462
<i>Sharath Adavanne ; Archontis Politis ; Tuomas Virtanen</i>	

DEEP CONVOLUTIONAL NEURAL NETWORKS FOR CHAOS IDENTIFICATION IN SIGNAL PROCESSING	1467
<i>Andrey V. Makarenko</i>	
ELASTIC NEURAL NETWORKS: A SCALABLE FRAMEWORK FOR EMBEDDED COMPUTER VISION	1472
<i>Yue Bai ; Shuvra S. Bhattacharyya ; Antti P. Happonen ; Heikki Huttunen</i>	
BILINEAR RESIDUAL NEURAL NETWORK FOR THE IDENTIFICATION AND FORECASTING OF GEOPHYSICAL DYNAMICS	1477
<i>Ronan Fablet ; Said Ouala ; Cédric Herzet</i>	
MOVING TARGET CLASSIFICATION IN AUTOMOTIVE RADAR SYSTEMS USING CONVOLUTIONAL RECURRENT NEURAL NETWORKS	1482
<i>Sangtae Kim ; Seunghwan Lee ; Seungho Doo ; Byonghyo Shim</i>	
OPTIMIZED BINARY HASHING CODES GENERATED BY SIAMESE NEURAL NETWORKS FOR IMAGE RETRIEVAL	1487
<i>Abin Jose ; Timo Horstmann ; Jens-Rainer Ohm</i>	
REAL-TIME HAND GESTURE RECOGNITION BASED ON ARTIFICIAL FEED-FORWARD NEURAL NETWORKS AND EMG	1492
<i>Marco E. Benalcázar ; Carlos E. Anchundia ; Jonathan A. Zea ; Patricio Zambrano ; Andrés G. Jaramillo ; Marco Segura</i>	
HIERARCHIC CONVNETS FRAMEWORK FOR RARE SOUND EVENT DETECTION	1497
<i>Fabio Vesperini ; Diego Droghini ; Emanuele Principi ; Leonardo Gabrielli ; Stefano Squartini</i>	
RESOURCE ALLOCATION FOR QF VMIMO RECEIVE COOPERATION IN URBAN TRAFFIC HOTSPOTS	1502
<i>Tim Rüegg ; Armin Witteben</i>	
STOCHASTIC GEOMETRY MODELING OF CELLULAR NETWORKS: A NEW DEFINITION OF COVERAGE AND ITS APPLICATION TO ENERGY EFFICIENCY OPTIMIZATION	1507
<i>Marco Di Renzo ; Alessio Zappone ; Thanh Tu Lam ; Mérouane Debbah</i>	
EFFECTIVE NETWORK AREA FOR EFFICIENT SIMULATION OF FINITE AREA WIRELESS NETWORKS	1512
<i>Mehdi Fereydooni ; Martin Klaus Müller ; Markus Rupp</i>	
SPARSE BEAMFORMING FOR MM WAVE SPECTRUM SHARING SYSTEMS	1517
<i>Miguel Ángel Vázquez ; Luis Blanco ; Ana Pérez-Neira</i>	
COVERAGE-IMPROVEMENT OF V2I COMMUNICATION THROUGH CAR-RELAYS IN MICROCELLULAR URBAN NETWORKS	1522
<i>Blanca Ramos Elbal ; Martin Klaus Müller ; Stefan Schwarz ; Markus Rupp</i>	
MULTICHANNEL AUDIO FRONT-END FOR FAR-FIELD AUTOMATIC SPEECH RECOGNITION	1527
<i>Amit Chhetri ; Philip Hilmes ; Trausti Kristjánsson ; Wai Chu ; Mohamed Mansour ; Xiaoxue Li ; Xianxian Zhang</i>	
COLLABORATIVE SPEECH DEREVERBERATION: REGULARIZED TENSOR FACTORIZATION FOR CROWDSOURCED MULTI-CHANNEL RECORDINGS	1532
<i>Sanna Wager ; Minje Kim</i>	
RECONSTRUCTION OF THE VIRTUAL MICROPHONE SIGNAL BASED ON THE DISTRIBUTED RAY SPACE TRANSFORM	1537
<i>Mirco Pezzoli ; Federico Borra ; Fabio Antonacci ; Augusto Sarti ; Stefano Tubaro</i>	
A RECURSIVE EXPECTATION-MAXIMIZATION ALGORITHM FOR ONLINE MULTI-MICROPHONE NOISE REDUCTION	1542
<i>Ofer Schwartz ; Sharon Gannot</i>	
AN ONLINE EXPECTATION-MAXIMIZATION ALGORITHM FOR TRACKING ACOUSTIC SOURCES IN MULTI-MICROPHONE DEVICES DURING MUSIC PLAYBACK	1547
<i>Daniele Giacobello</i>	
NEURAL-NETWORK SUPERVISED MAXIMUM LIKELIHOOD-BASED ON-LINE DEREVERBERATION	1552
<i>Saeed Mosayyebpour ; Francesco Nesta</i>	
INDEPENDENT DEEPLY LEARNED MATRIX ANALYSIS FOR MULTICHANNEL AUDIO SOURCE SEPARATION	1557
<i>Shinichi Mogami ; Hayato Sumino ; Daichi Kitamura ; Norihiro Takamune ; Shinnosuke Takamichi ; Hiroshi Saruwatari ; Nobutaka Ono</i>	
LCMV BEAMFORMER WITH DNN-BASED MULTICHANNEL CONCURRENT SPEAKERS DETECTOR	1562
<i>Shlomo E. Chazan ; Jacob Goldberger ; Sharon Gannot</i>	

DEEP NEURAL NETWORKS FOR JOINT VOICE ACTIVITY DETECTION AND SPEAKER LOCALIZATION	1567
<i>Paolo Vecchiotti ; Emanuele Principi ; Stefano Squartini ; Francesco Piazza</i>	
LEARNING-BASED ACOUSTIC SOURCE LOCALIZATION IN ACOUSTIC SENSOR NETWORKS USING THE COHERENT-TO-DIFFUSE POWER RATIO	1572
<i>Andreas Brendel ; Walter Kellermann</i>	
RAW MULTI-CHANNEL AUDIO SOURCE SEPARATION USING MULTI- RESOLUTION CONVOLUTIONAL AUTO-ENCODERS	1577
<i>Emad M. Grais ; Dominic Ward ; Mark D. Plumbley</i>	
TIME-FREQUENCY-BIN-WISE BEAMFORMER SELECTION AND MASKING FOR SPEECH ENHANCEMENT IN UNDERDETERMINED NOISY SCENARIOS	1582
<i>Kouei Yamaoka ; Andreas Brendel ; Nobutaka Ono ; Shoji Makino ; Michael Buerger ; Takeshi Yamada ; Walter Kellermann</i>	
PARALLEL AND HYBRID SOFT-THRESHOLDING ALGORITHMS WITH LINE SEARCH FOR SPARSE NONLINEAR REGRESSION	1587
<i>Yang Yang ; Marius Pesavento ; Symeon Chatzinotas ; Björn Ottersten</i>	
SIMULTANEOUS SIGNAL SUBSPACE RANK AND MODEL SELECTION WITH AN APPLICATION TO SINGLE-SNAPSHOT SOURCE LOCALIZATION	1592
<i>Muhammad Naveed Tabassum ; Esa Ollila</i>	
LEARNING DICTIONARY-BASED UNIONS OF SUBSPACES FOR IMAGE DENOISING	1597
<i>David Hong ; Robert P. Malinas ; Jeffrey A. Fessler ; Laura Balzano</i>	
ROBUST SUBSPACE CLUSTERING FOR RADAR DETECTION	1602
<i>A. Breloy ; M. N. El Korso ; A. Panahi ; H. Krim</i>	
SMALL VARIANCE ASYMPTOTICS AND BAYESIAN NONPARAMETRICS FOR DICTIONARY LEARNING	1607
<i>Clément Elvira ; Hong-Phuong Dang ; Pierre Chainais</i>	
INFORMATION SUBSPACE-BASED FUSION FOR VEHICLE CLASSIFICATION	1612
<i>Sally Ghanem ; Ashkan Panahi ; Hamid Krim ; Ryan A. Kerekes ; John Mattingly</i>	
TRACKING AND SENSOR FUSION IN DIRECTION OF ARRIVAL ESTIMATION USING OPTIMAL MASS TRANSPORT	1617
<i>Filip Elvander ; Isabel Haasler ; Andreas Jakobsson ; Johan Karlsson</i>	
ROBUSTIFYING SEQUENTIAL MULTIPLE HYPOTHESIS TESTS IN DISTRIBUTED SENSOR NETWORKS	1622
<i>Mark R. Leonard ; Maximilian Stiefel ; Michael Fauß ; Abdelhak M. Zoubir</i>	
PRIOR INFLUENCE ON WEISS-WEINSTEIN BOUNDS FOR MULTIPLE CHANGE- POINT ESTIMATION	1627
<i>Lucien Bacharach ; Alexandre Renaux ; Mohammed Nabil El Korso</i>	
IMPROVED ADAPTIVE IMPORTANCE SAMPLING BASED ON VARIATIONAL INFERENCE	1632
<i>Matthew Dowling ; Josue Nassar ; Petar M. Djuric ; Mónica F. Bugallo</i>	
IN SEARCH FOR IMPROVED AUXILIARY PARTICLE FILTERS	1637
<i>Victor Elvira ; Luca Martino ; Mónica F. Bugallo ; Petar M. Djuric</i>	
SPEECH ENHANCEMENT USING KALMAN FILTERING IN THE LOGARITHMIC BARK POWER SPECTRAL DOMAIN	1642
<i>Nikolaos Dionelis ; Mike Brookes</i>	
ENHANCED TIME-FREQUENCY MASKING BY USING NEURAL NETWORKS FOR MONAURAL SOURCE SEPARATION IN REVERBERANT ROOM ENVIRONMENTS	1647
<i>Yang Sun ; Wenwu Wang ; Jonathon A. Chambers ; Syed Mohsen Naqvi</i>	
INDEPENDENT POSITIVE SEMIDEFINITE TENSOR ANALYSIS IN BLIND SOURCE SEPARATION	1652
<i>Rintaro Ikeshita</i>	
INDEPENDENT LOW-RANK TENSOR ANALYSIS FOR AUDIO SOURCE SEPARATION	1657
<i>Kazuyoshi Yoshii ; Koichi Kitamura ; Yoshiaki Bando ; Eita Nakamura ; Tatsuya Kawahara</i>	
NOISY CGMM: COMPLEX GAUSSIAN MIXTURE MODEL WITH NON-SPARSE NOISE MODEL FOR JOINT SOURCE SEPARATION AND DENOISING	1662
<i>Nobutaka Ito ; Christopher Schyrmura ; Shoko Araki ; Tomohiro Nakatani</i>	
FASTFCA: JOINT DIAGONALIZATION BASED ACCELERATION OF AUDIO SOURCE SEPARATION USING A FULL-RANK SPATIAL COVARIANCE MODEL	1667
<i>Nobutaka Ito ; Shoko Araki ; Tomohiro Nakatani</i>	
MODELING THE VISUAL PATHWAY FOR STIMULUS OPTIMIZATION IN BRAIN-COMPUTER INTERFACES	1672
<i>F. Sobreira ; C. Tremmel ; D.J. Krusienski</i>	

A DEEP LEARNING MI - EEG CLASSIFICATION MODEL FOR BCIS	1676
<i>Hauke Dose ; Jakob S. Möller ; Sadasivan Puthusserypady ; Helle K. Iversen</i>	
PERFORMANCE OF NESTED VS. NON-NESTED SVM CROSS-VALIDATION METHODS IN VISUAL BCI: VALIDATION STUDY	1680
<i>Mohammed J. Abdulaal ; Alexander J. Casson ; Patrick Gaydecki</i>	
TRANSFER LEARNING FOR SSVEP-BASED BCI USING RIEMANNIAN SIMILARITIES BETWEEN USERS	1685
<i>Emmanuel K. Kalunga ; Sylvain Chevallier ; Quentin Barthélemy</i>	
FAST AND ACCURATE MULTICLASS INFERENCE FOR MI-BCIS USING LARGE MULTISCALE TEMPORAL AND SPECTRAL FEATURES	1690
<i>Michael Hersche ; Tino Rellstab ; Pasquale Davide Schiavone ; Lukas Cavigelli ; Luca Benini ; Abbas Rahimi</i>	
USE OF TOPOLOGICAL DATA ANALYSIS IN MOTOR INTENTION BASED BRAIN-COMPUTER INTERFACES	1695
<i>Fatih Altindis ; Bulent Yilmaz ; Sergey Borisenok ; Kutay Icoz</i>	
DEFECT DETECTION FROM 3D ULTRASONIC MEASUREMENTS USING MATRIX-FREE SPARSE RECOVERY ALGORITHMS	1700
<i>Sebastian Semper ; Jan Kirchof ; Christoph Wagner ; Fabian Krieg ; Florian Römer ; Ahmad Osman ; Giovanni Del Galdo</i>	
COMPRESSED EDGE SPECTRUM SENSING FOR WIDEBAND COGNITIVE RADIOS	1705
<i>Edgar Beck ; Carsten Bockelmann ; Armin Dekorsy</i>	
COMPRESSIVE SENSING OF TEMPORALLY CORRELATED SOURCES USING ISOTROPIC MULTIVARIATE STABLE LAWS	1710
<i>George Tzagkarakis ; John P. Nolan ; Panagiotis Tsakalides</i>	
A PROXIMAL METHOD FOR CONVOLUTIONAL DICTIONARY LEARNING WITH CONVERGENCE PROPERTY	1715
<i>Guan-Ju Peng</i>	
APPROXIMATE RECOVERY OF INITIAL POINT-LIKE AND INSTANTANEOUS SOURCES FROM COARSELY SAMPLED THERMAL FIELDS VIA INFINITE-DIMENSIONAL COMPRESSED SENSING	1720
<i>Axel Flinth ; Ali Hashemi</i>	
JOINT LOW MUTUAL AND AVERAGE COHERENCE DICTIONARY LEARNING	1725
<i>Javad Parsa ; Mostafa Sadeghi ; Massoud Babaie-Zadeh ; Christian Jutten</i>	
SPARSE METHOD FOR TIP-TIMING SIGNALS ANALYSIS WITH NON STATIONARY ENGINE ROTATION FREQUENCY	1730
<i>Antoine Bouchain ; Agathe Vercoutter ; José Picheral ; Arnaud Talon</i>	
INJECTING IMAGE PRIORS INTO LEARNABLE COMPRESSIVE SUBSAMPLING	1735
<i>Martino Ferrari ; Olga Taran ; Taras Holotyak ; Karen Egiazarian ; Slava Voloshynovskiy</i>	
DICTIONARY LEARNING FOR PHOTOMETRIC REDSHIFT ESTIMATION	1740
<i>Joana Frontera-Pons ; Florent Sureau ; Bruno Moraes ; Jérôme Bobin ; Filipe B. Abdalla ; Jean-Luc Starck</i>	
COMPUTATIONALLY EFFICIENT ESTIMATION OF MULTI-DIMENSIONAL DAMPED MODES USING SPARSE WIDEBAND DICTIONARIES	1745
<i>Martin Jälmy ; Johan Swärd ; Filip Elvander ; Andreas Jakobsson</i>	
STRUCTURED SPARSITY REGULARIZATION FOR GRAVITATIONAL- WAVE POLARIZATION RECONSTRUCTION	1750
<i>Fangchen Feng ; Eric Chassande-Mottin ; Philippe Bacon ; Aurélie Fraysse</i>	
SPARSE TIME-FREQUENCY REPRESENTATION OF GRAVITATIONAL-WAVE SIGNALS IN UNIONS OF WILSON BASES	1755
<i>Quentin Bammey ; Philippe Bacon ; Eric Chassande- Mottin ; Aurelia Fraysse ; Stephane Jaffard</i>	
ROBUST DATA HIDING SCHEME FOR COMPRESSIVELY SENSED SIGNALS	1760
<i>Mehmet Yamaç ; Bülent Sankur ; Moncef Gabbouj</i>	
RETHINKING COMPRESSIVE SENSING	1765
<i>Giuseppe Campobello</i>	
INCOHERENT PROJECTION MATRIX DESIGN FOR COMPRESSED SENSING USING ALTERNATING OPTIMIZATION	1770
<i>Meenakshi ; Seshan Sriranzaraian</i>	
REAL-TIME DEEP LEARNING METHOD FOR ABANDONED LUGGAGE DETECTION IN VIDEO	1775
<i>Sorina Smeureanu ; Radu Tudor Ionescu</i>	
RESPIRATORY RATE MONITORING BY VIDEO PROCESSING USING LOCAL MOTION MAGNIFICATION	1780
<i>Davide Alinovi ; Gianluigi Ferrari ; Francesco Pisani ; Riccardo Raheli</i>	

A VECTOR OF LOCALLY AGGREGATED DESCRIPTORS FRAMEWORK FOR ACTION RECOGNITION ON MOTION CAPTURE DATA	1785
<i>Ioannis Kapsouras ; Nikos Nikolaidis</i>	
IMAGE ANALYSIS BASED FISH TAIL BEAT FREQUENCY ESTIMATION FOR FISHWAY EFFICIENCY	1790
<i>Yasin Yildirim ; B. Ugur Töreyn ; Serhat Küçükali ; Bulent Verep ; Davut Turan ; Ahmet Alp</i>	
FACE FRONTALIZATION FOR CROSS-POSE FACIAL EXPRESSION RECOGNITION	1795
<i>Deniz Engin ; Christophe Ecabert ; Hazim Kemal Ekenel ; Jean-Philippe Thiran</i>	
INFERRING USER GENDER FROM USER GENERATED VISUAL CONTENT ON A DEEP SEMANTIC SPACE	1800
<i>David Semedo ; João Magalhães ; Flávio Martins</i>	
TOWARDS AUTOMATIC DETECTION OF ANIMALS IN CAMERA-TRAP IMAGES.....	1805
<i>Alexander Loos ; Christian Weigel ; Mona Koehler</i>	
EXTRAPOLATED PROJECTION METHODS FOR PAPR REDUCTION	1810
<i>Jochen Fink ; Renato L.G. Cavalcante ; Peter Jung ; Slawomir Stanczak</i>	
ENERGY BALANCING FOR ROBOTIC AIDED CLUSTERED WIRELESS SENSOR NETWORKS USING MOBILITY DIVERSITY ALGORITHMS	1815
<i>Daniel Bonilla Licea ; I Edmond Nurellari ; Mounir Ghogho</i>	
PERTURBATION ANALYSIS OF ROOT-MUSIC-TYPE METHODS FOR BLIND NETWORK-ASSISTED DIVERSITY MULTIPLE ACCESS	1820
<i>Naem Akl ; Ahmed Tewfik</i>	
EFFICIENT CHANNEL ESTIMATION IN MILLIMETER WAVE HYBRID MIMO SYSTEMS WITH LOW RESOLUTION ADCS	1825
<i>Aryan Kaushik ; Evangelos Vlachos ; John Thompson ; Alessandro Perelli</i>	
DEDICATED BEAM-BASED CHANNEL TRAINING TECHNIQUE FOR MILLIMETER WAVE COMMUNICATIONS WITH HIGH MOBILITY	1830
<i>Jisu Bae ; Sun Hong Lim ; Jin Hyeok Yoo ; Jun Won Choi ; Byonghyo Shim</i>	
BLIND SPECTRUM SENSING BASED ON RECURRENCE QUANTIFICATION ANALYSIS IN THE CONTEXT OF COGNITIVE RADIO	1835
<i>J.-M. Kadjo ; K. C. Yao ; A. Mansour</i>	
EFFICIENT LIGHT FIELD IMAGE CODING WITH DEPTH ESTIMATION AND VIEW SYNTHESIS	1840
<i>Takanori Senoh ; Kenji Yamamoto ; Nobuji Tetsutani ; Hiroshi Yasuda</i>	
LIGHT FIELD IMAGE CODING USING HIGH ORDER PREDICTION TRAINING	1845
<i>Ricardo J. S. Monteiro ; Paulo J. L. Nunes ; Sérgio M. M. Faria ; Nuno M. M. Rodrigues</i>	
RATE-DISTORTION OPTIMIZED SUPER-RAY MERGING FOR LIGHT FIELD COMPRESSION	1850
<i>Xin Su ; Mira Rizkallah ; Thomas Mauzev ; Christine Guillemot</i>	
SCALABLE LIGHT FIELD CODING WITH SUPPORT FOR REGION OF INTEREST ENHANCEMENT	1855
<i>Caroline Conti ; Luís Ducla Soares ; Paulo Nunes</i>	
LIGHT FIELD COMPRESSION OF HDCA IMAGES COMBINING LINEAR PREDICTION AND JPEG 2000	1860
<i>Pekka Astola ; Ioan Tabus</i>	
COMPARISON OF INTERACTIVE SUBJECTIVE METHODOLOGIES FOR LIGHT FIELD QUALITY EVALUATION.....	1865
<i>Irene Viola ; Touradj Ebrahimi</i>	
A COMPARISON OF AUDIO SIGNAL PREPROCESSING METHODS FOR DEEP NEURAL NETWORKS ON MUSIC TAGGING	1870
<i>Keunwoo Choi ; György Fazekas ; Mark Sandler ; Kyunghyun Cho</i>	
CLASSIFICATION ASYMPTOTICS IN THE RANDOM MATRIX REGIME	1875
<i>Romain Couillet ; Zhenyu Liao ; Xiaoyi Mai</i>	
REGULARIZING AUTOENCODER-BASED MATRIX COMPLETION MODELS VIA MANIFOLD LEARNING.....	1880
<i>Duc Minh Nguyen ; Evaggelia Tsiligianni ; Robert Calderbank ; Nikos Deligiannis</i>	
TASK-DRIVEN DICTIONARY LEARNING BASED ON CONVOLUTIONAL NEURAL NETWORK FEATURES.....	1885
<i>Tom Tirer ; Raja Giryes</i>	
FAST CONVERGENCE FOR STOCHASTIC AND DISTRIBUTED GRADIENT DESCENT IN THE INTERPOLATION LIMIT	1890
<i>Partha P Mitra</i>	

ON DEEP LEARNING FOR INVERSE PROBLEMS	1895
<i>Jaweria Amjad ; Jure Sokolic ; Miguel R.D. Rodrigues</i>	
AUTOMATIC CHORD RECOGNITION WITH HIGHER-ORDER HARMONIC LANGUAGE MODELLING	1900
<i>Filip Korzeniowski ; Gerhard Widnaer</i>	
CONVOLVING GAUSSIAN KERNELS FOR RNN-BASED BEAT TRACKING	1905
<i>Tian Cheng ; Satoru Fukayama ; Masataka Goto</i>	
A HIERARCHICAL LATENT MIXTURE MODEL FOR POLYPHONIC MUSIC ANALYSIS	1910
<i>Cian O'brien ; Mark D. Plumbley</i>	
BEAT TRACKING USING RECURRENT NEURAL NETWORK: A TRANSFER LEARNING APPROACH	1915
<i>Davide Fiochi ; Michele Buccoli ; Massimiliano Zanoni ; Fabio Antonacci ; Augusto Sarti</i>	
UNSUPERVISED SINGING VOICE SEPARATION BASED ON ROBUST PRINCIPAL COMPONENT ANALYSIS EXPLOITING RANK-1 CONSTRAINT	1920
<i>Feng Li ; Masato Akagi</i>	
REAL-TIME DCT LEARNING-BASED RECONSTRUCTION OF NEURAL SIGNALS	1925
<i>Rabeh Karimi Mahabadi ; Cosimo Aprile ; Volkan Cevher</i>	
COMBINED ANALYSIS-L1 AND TOTAL VARIATION ADMM WITH APPLICATIONS TO MEG BRAIN IMAGING AND SIGNAL RECONSTRUCTION	1930
<i>Rui Gao ; Filip Tronarp ; Simo Särkkä</i>	
IMPROVING EEG SOURCE LOCALIZATION THROUGH SPATIO-TEMPORAL SPARSE BAYESIAN LEARNING	1935
<i>Ali Hashemi ; Stefan Haufe</i>	
ANALYSIS OF ACTIVITY STATES OF LOCAL NEURONAL MICROCIRCUITS IN MOUSE BRAIN	1940
<i>Di Jin ; Boriana Boiadjeva ; Hendrik Backhaus ; Michael Faub ; Ting Fu ; Albrecht Stroh ; Anja Klein ; Abdelhak M. Zoubir</i>	
A NEW APPROACH TO SAMPLE ENTROPY OF MULTI-CHANNEL SIGNALS: APPLICATION TO EEG SIGNALS	1945
<i>Mohamad El Sayed Hussein Jomaa ; Patrick Van Bogaert ; Nisrine Jrad ; Marcelo A. Colominas ; Anne Humeau-Heurtier</i>	
SIMULTANEOUS ESTIMATION OF A SYSTEM MATRIX BY COMPRESSED SENSING AND FINDING OPTIMAL REGULARIZATION PARAMETERS FOR THE INVERSION PROBLEM	1950
<i>Marco Maass ; Philipp Koch ; Fabrice Katzberg ; Alfred Mertins</i>	
PATH ORTHOGONAL MATCHING PURSUIT FOR K-SPARSE IMAGE RECONSTRUCTION	1955
<i>Tegan H. Emerson ; Timothy Doster ; Colin Olson</i>	
OBJECT DETECTION ON COMPRESSIVE MEASUREMENTS USING CORRELATION FILTERS AND SPARSE REPRESENTATION	1960
<i>Hector Vargas ; Yesid Fonseca ; Henry Arguello</i>	
KNOWLEDGE-AIDED NORMALIZED ITERATIVE HARD THRESHOLDING ALGORITHMS FOR SPARSE RECOVERY	1965
<i>Qianru Jiang ; Rodrigo C. De Lamare ; Yuriy Zakharov ; Sheng Li ; Xiongxiang He</i>	
SIGNAL RECONSTRUCTION FROM SUB-SAMPLED AND NONLINEARLY DISTORTED OBSERVATIONS	1970
<i>Arthur Marmin ; Marc Castella ; Jean-Christophe Pesquet ; Laurent Duval</i>	
ON THE IMPACT OF TENSOR COMPLETION IN THE CLASSIFICATION OF UNDERSAMPLED HYPERSPECTRAL IMAGERY	1975
<i>Michalis Giannopoulos ; Grigorios Tsagkatakis ; Panagiotis Tsakalides</i>	
SPATIO-SPECTRAL MULTICHANNEL RECONSTRUCTION FROM FEW LOW-RESOLUTION MULTISPECTRAL DATA	1980
<i>M.A. Hadj-Youcef ; F. Orioux ; A. Fraysse ; A. Abergel</i>	
SPECTRAL IMAGE FUSION FROM COMPRESSIVE PROJECTIONS USING TOTAL-VARIATION AND LOW-RANK REGULARIZATIONS	1985
<i>Tatiana Gelvez ; Henry Arguello</i>	
GRAPH MANIFOLD CLUSTERING BASED BAND SELECTION FOR HYPERSPECTRAL FACE RECOGNITION	1990
<i>Shubhobrata Bhattacharya ; Samiran Das ; Aurobinda Routray</i>	
MULTI-RESOLUTION RECONSTRUCTIONS FROM COMPRESSIVE SPECTRAL CODED PROJECTIONS	1995
<i>Claudia V. Correa ; Henry Arguello ; Gonzalo R. Arce</i>	
SPARSE AUTOENCODERS USING NON-SMOOTH REGULARIZATION	2000
<i>Sajjad Amini ; Shahrokh Ghaermaghani</i>	

CLASSIFICATION BY RE-GENERATION: TOWARDS CLASSIFICATION BASED ON VARIATIONAL INFERENCE	2005
<i>Shideh Rezaeifar ; Olga Taran ; Slava Voloshynovskiy</i>	
RIEMANNIAN JOINT DIMENSIONALITY REDUCTION AND DICTIONARY LEARNING ON SYMMETRIC POSITIVE DEFINITE MANIFOLDS.....	2010
<i>Hiroyuki Kasai ; Bamdev Mishra</i>	
TRUST-REGION MINIMIZATION ALGORITHM FOR TRAINING RESPONSES (TRMINATR): THE RISE OF MACHINE LEARNING TECHNIQUES.....	2015
<i>Jacob Rafati ; Omar Deguchy ; Roummel F. Marcia</i>	
NOVEL ALGORITHM FOR INCREMENTAL L1-NORM PRINCIPAL-COMPONENT ANALYSIS	2020
<i>Mayur Dhanaraj ; Panos P. Markopoulos</i>	
BLIND MULTI-CLASS ENSEMBLE LEARNING WITH DEPENDENT CLASSIFIERS	2025
<i>Panagiotis A. Tragantitis ; Georgios B. Giannakis</i>	
A DEEP REINFORCEMENT LEARNING APPROACH FOR EARLY CLASSIFICATION OF TIME SERIES	2030
<i>C. Martinez ; G. Perrin ; E. Ramasso ; M. Rombaut</i>	
AUTOMATED DETECTION OF SOLAR CELL DEFECTS WITH DEEP LEARNING	2035
<i>Alexander Bartler ; Lukas Mauch ; Bin Yang ; Michael Reuter ; Liviu Stoicescu</i>	
MACHINE LEARNING FOR USER TRAFFIC CLASSIFICATION IN WIRELESS SYSTEMS	2040
<i>Enrico Testi ; Elia Favarelli ; Andrea Giorgetti</i>	
SKELETON-BASED ACTION RECOGNITION BASED ON DEEP LEARNING AND GRASSMANNIAN PYRAMIDS.....	2045
<i>Dimitrios Konstantinidis ; Kosmas Dimitropoulos ; Petros Daras</i>	
MACHINE LEARNING BASED INDOOR LOCALIZATION USING A REPRESENTATIVE K-NEAREST-NEIGHBOR CLASSIFIER ON A LOW-COST IOT-HARDWARE.....	2050
<i>Matthias Dziubany ; Rüdiger Machhammer ; Hendrik Laux ; Anke Schmeink ; Klaus-Uwe Gollmer ; Guido Burger ; Guido Dartmann</i>	
AN UNSUPERVISED FRAME SELECTION TECHNIQUE FOR ROBUST EMOTION RECOGNITION IN NOISY SPEECH	2055
<i>Meghna Pandharipande ; Rupayan Chakraborty ; Ashish Panda ; Sunil Kumar Kopparapu</i>	
ABNORMAL BEHAVIOR DETECTION IN CROWDED SCENES USING DENSITY HEATMAPS AND OPTICAL FLOW	2060
<i>Lazaros Lazaridis ; Anastasios Dimou ; Petros Daras</i>	
DUAL-CHANNEL VTS FEATURE COMPENSATION WITH IMPROVED POSTERIOR ESTIMATION	2065
<i>Iván López-Espejo ; Antonio M. Peinado ; Angel M. Gomez ; José A. González ; Santiago Prieto-Calero</i>	
SPEAKING RATE CHANGES AFFECT PHONE DURATIONS DIFFERENTLY FOR NEUTRAL AND EMOTIONAL SPEECH.....	2070
<i>Yingming Gao ; Peter Birkholz</i>	
ESTIMATION OF PITCH TARGETS FROM SPEECH SIGNALS BY JOINT REGULARIZED OPTIMIZATION	2075
<i>Peter Birkholz ; Patrick Schmaser ; Yi Xu</i>	
HYPO AND HYPERARTICULATED SPEECH DATA AUGMENTATION FOR SPONTANEOUS SPEECH RECOGNITION	2080
<i>Sung Joo Lee ; Byung-Ok Kang ; Hoon Chung ; Jeon Gue Park ; Yun Keun Lee</i>	
NONLINEAR PREDICTION OF SPEECH BY ECHO STATE NETWORKS	2085
<i>Ziyue Zhao ; Huijun Liu ; Tim Fingscheidt</i>	
APPLICATION-LAYER REDUNDANCY FOR THE EVS CODEC	2090
<i>Najmeddine Majed ; Stephane Ragot ; Laetitia Gros ; Xavier Lagrange ; Alberto Blanc</i>	
REDUCED-COMPLEXITY SEMI-DISTRIBUTED MULTI-CHANNEL MULTI-FRAME MVDR FILTER	2095
<i>Raziyeh Ranjbaryan ; Hamid Reza Abutalebi ; Simon Doclo</i>	
CYCLEGAN-VC: NON-PARALLEL VOICE CONVERSION USING CYCLE-CONSISTENT ADVERSARIAL NETWORKS.....	2100
<i>Takuhiro Kaneko ; Hirokazu Kameoka</i>	
ON THE AUTOMATIC VALIDATION OF SPEECH ALIGNMENT	2105
<i>Georgios Athanasopoulos ; Benoît Macq</i>	
CENTERLINE ARTICULATORY MODELS OF THE VELUM AND EPIGLOTTIS FOR ARTICULATORY SYNTHESIS OF SPEECH.....	2110
<i>Yves Laprie ; Benjamin Elie ; Anastasiia Tsukanova ; Pierre-André Vuissoz</i>	

ELECTROLARYNGEAL SPEECH ENHANCEMENT WITH STATISTICAL VOICE CONVERSION BASED ON CLDNN	2115
<i>Kazuhiro Kobayashi ; Tomoki Toda</i>	
A DEEP CONVOLUTIONAL NEURAL NETWORK FOR SEMANTIC PIXEL-WISE SEGMENTATION OF ROAD AND PAVEMENT SURFACE CRACKS	2120
<i>Mark David Jenkins ; Thomas Arthur Carr ; Maria Insa Iglesias ; Tom Buggy ; Gordon Morison</i>	
MUNICIPAL INFRASTRUCTURE ANOMALY AND DEFECT DETECTION	2125
<i>David Abou Chacra ; John Zelek</i>	
AN ACOUSTIC IMAGE-SOURCE CHARACTERISATION OF SURFACE PROFILES	2130
<i>P. J. Dawson ; E. De Sena ; P. A. Naylor</i>	
ROAD SURFACE CRACK DETECTION USING A LIGHT FIELD CAMERA	2135
<i>David Fernandes ; Paulo Lobato Correia ; Henrique Oliveira</i>	
A FAST AND ACCURATE AUTOMATED PAVEMENT CRACK DETECTION ALGORITHM	2140
<i>Anirban Chatterjee ; Yi-Chang Tsai</i>	
UNSUPERVISED CALIBRATION OF RGB-NIR CAPTURE PAIRS UTILIZING DENSE MULTIMODAL IMAGE CORRESPONDENCES	2145
<i>Filipe Gama ; Mihail Georgiev ; Atanas Gotchev</i>	
LENSET LIGHT FIELD IMAGING SCALABLE CODING	2150
<i>João Garrote ; Catarina Brites ; João Ascenso ; Fernando Pereira</i>	
A STUDY ON THE IMPACT OF VISUALIZATION TECHNIQUES ON LIGHT FIELD PERCEPTION	2155
<i>Federica Battisti ; Marco Carli ; Patrick Le Callet</i>	
REAL-TIME QUALITY ASSESSMENT OF VIDEOS FROM BODY-WORN CAMERAS	2160
<i>Yuan-Yi Chang ; Riccardo Mazzon ; Andrea Cavallaro</i>	
INTRINSIC LIGHT FIELD DECOMPOSITION AND DISPARITY ESTIMATION WITH DEEP ENCODER-DECODER NETWORK	2165
<i>Anna Alperovich ; Ole Johannsen ; Bastian Goldluecke</i>	
VIRTUAL CAMERA MODELING FOR MULTI-VIEW SIMULATION OF SURVEILLANCE SCENES	2170
<i>Niccoló Bisagno ; Nicola Conci</i>	
UNIFIED STOCHASTIC REVERBERATION MODELING	2175
<i>Roland Badeau</i>	
SIMULTANEOUS MEASUREMENT OF SPATIAL ROOM IMPULSE RESPONSES FROM MULTIPLE SOUND SOURCES USING A CONTINUOUSLY MOVING MICROPHONE	2180
<i>Nara Hahn ; Sascha Spors</i>	
AUDIO VIRTUALIZATION OF FACADE ACOUSTIC INSULATION BY CONVEX OPTIMIZATION	2185
<i>Alessandro Lapini ; Chiara Bartalucci ; Francesco Borchì ; Fabrizio Argenti ; Monica Carfagni</i>	
SPARSITY BASED FRAMEWORK FOR SPATIAL SOUND REPRODUCTION IN SPHERICAL HARMONIC DOMAIN	2190
<i>Gyanajyoti Routray ; Rajesh M Hegde</i>	
EFFICIENT ML-ESTIMATOR FOR BLIND REVERBERATION TIME ESTIMATION	2195
<i>Heinrich W. Löllmann ; Andreas Brendel ; Walter Kellermann</i>	
MULTI-FREQUENCY PHASE RETRIEVAL FROM NOISY DATA	2200
<i>Vladimir Katkovnik ; Karen Egiazarian</i>	
PLENOPTIC SENSOR: APPLICATION TO EXTEND FIELD-OF-VIEW	2205
<i>Benoît Vandame ; Valter Drazic ; Matthieu Hog ; Neus Sabater</i>	
A FAST ENDMEMBER ESTIMATION ALGORITHM FROM COMPRESSIVE MEASUREMENTS	2210
<i>Edwin Vargas ; Samuel Pinilla ; Henry Arguello</i>	
MULTI-RESOLUTION CODED APERTURES BASED ON SIDE INFORMATION FOR SINGLE PIXEL SPECTRAL RECONSTRUCTION	2215
<i>Hans Garcia ; Claudia V. Correa ; Karen Sánchez ; Edwin Vargas ; Henry Arguello</i>	
A TRACE LASSO REGULARIZED LL-NORM GRAPH CUT FOR HIGHLY CORRELATED NOISY HYPERSPECTRAL IMAGE	2220
<i>Ramanarayan Mohanty ; S L Happy ; Nilesh Suthar ; Aurobinda Routray</i>	
FAST HYPERSPECTRAL CUBE RECONSTRUCTION FOR A DOUBLE DISPERSER IMAGER	2225
<i>Ibrahim Ardi ; Hervé Carfantan ; Simon Lacroix ; Antoine Monmayrant</i>	
POISSON IMAGE DENOISING USING BEST LINEAR PREDICTION: A POST-PROCESSING FRAMEWORK	2230
<i>Milad Niknejad ; Mário A.T. Figueiredo</i>	

SATELLITE IMAGE SEGMENTATION WITH DEEP RESIDUAL ARCHITECTURES FOR TIME-CRITICAL APPLICATIONS	2235
<i>Sina Ghassemi ; Constantin Sandu ; Attilio Fianrottini ; Fabio Giulio Tonolo ; Piero Boccardo ; Gianluca Francini ; Enrico Magli</i>	
ADAPTIVE GUIDED UPSAMPLING FOR COLOR IMAGE DEMOSAICKING	2240
<i>Yosuke Ueki ; Takuro Yamaguchi ; Masaaki Ikehara</i>	
COMPUTATIONALLY EFFICIENT IMAGE SUPER RESOLUTION FROM TOTALLY ALIASED LOW RESOLUTION IMAGES	2245
<i>A Anil Kumar ; N Narendra ; P Balamuralidhar ; M Girish Chandra</i>	
ON MULTI-VIEW FACE RECOGNITION USING LYTRO IMAGES	2250
<i>Valeria Chiesa ; Jean-Luc Dugelay</i>	
CAPSULE ROUTING FOR SOUND EVENT DETECTION	2255
<i>Turab Iqbal ; Yong Xu ; Qiuqiang Kong ; Wenwu Wang</i>	
“WHAT ARE YOU LISTENING TO?” EXPLAINING PREDICTIONS OF DEEP MACHINE LISTENING SYSTEMS	2260
<i>Saumitra Mishra ; Bob L. Sturm ; Simon Dixon</i>	
COMPARATIVE STUDY ON SPOKEN LANGUAGE IDENTIFICATION BASED ON DEEP LEARNING.....	2265
<i>Panikos Heracleous ; Kohichi Takai ; Keiji Yasuda ; Yasser Mohammad ; Akio Yoneyama</i>	
PLAYLIST-BASED TAG PROPAGATION FOR IMPROVING MUSIC AUTO-TAGGING	2270
<i>Yi-Hsun Lin ; Chia-Hao Chung ; Homer H. Chen</i>	
ANALOG-TO-FEATURE (A2F) CONVERSION FOR AUDIO-EVENT CLASSIFICATION	2275
<i>Xinming Liu ; Emre Gönültaş ; Christoph Studer</i>	
MULTI-SATELLITE CYCLE-SLIP DETECTION AND EXCLUSION USING THE NOISE SUBSPACE OF RESIDUAL DYNAMICS.....	2280
<i>Jaume Riba ; Ferran De Cabrera ; José-Miguel Juan</i>	
OPTIMUM DETECTION FOR A CLASS OF STATIONARY METEOROLOGICAL RADARS.....	2285
<i>Fernando Darío Almeida García ; Marco Antonio Miguel Miranda ; José Cândido Silveira Santos Filho</i>	
CLASSIFICATION OF INTRA-PULSE MODULATION OF RADAR SIGNALS BY FEATURE FUSION BASED CONVOLUTIONAL NEURAL NETWORKS	2290
<i>Fatih Çağatay Akyon ; Yasar Kemal Alp ; Gokhan Gok ; Orhan Arıkan</i>	
CLASSIFICATION OF VOLCANO-SEISMIC SIGNALS WITH BAYESIAN NEURAL NETWORKS.....	2295
<i>Angel Bueno ; Manuel Titos ; Luz García ; Isaac Álvarez ; Jesús Ibañez ; Carmen Benítez</i>	
DECENTRALIZED SENSOR LOCALIZATION BY DECISION FUSION OF RSSI AND MOBILITY IN INDOOR ENVIRONMENTS	2300
<i>Daniel Alshamaa ; Farah Mourad-Chehade ; Paul Honeine</i>	
INTEGRATING DENOISING AUTOENCODER AND VECTOR TAYLOR SERIES WITH AUDITORY MASKING FOR SPEECH RECOGNITION IN NOISY CONDITIONS.....	2305
<i>A. Biswajit Das ; Ashish Panda</i>	
AUTOMATIC SPEECH PRONUNCIATION CORRECTION WITH DYNAMIC FREQUENCY WARPING-BASED SPECTRAL CONVERSION.....	2310
<i>Nobukatsu Hojo ; Hirokazu Kameoka ; Kou Tanaka ; Takuhiro Kaneko</i>	
AUTOMATIC SPEECH TRANSLATION SYSTEM SELECTING TARGET LANGUAGE BY DIRECTION-OF-ARRIVAL INFORMATION	2315
<i>Masanori Tsujikawa ; Koji Okabe ; Ken Hanazawa ; Yoshinobu Kajikawa</i>	
ONLINE PARAMETRIC NMF FOR SPEECH ENHANCEMENT	2320
<i>Mathew Shaji Kavalekalam ; Jesper Kjær Nielsen ; Liming Shi ; Mads Græsbøll Christensen ; Jesper Boldt</i>	
ON OPTIMAL FILTERING FOR SPEECH DECOMPOSITION	2325
<i>Alfredo Esquivel Jaramillo ; Jesper Kjær Nielsen ; Mads Gnesbøll Christensen</i>	
ESTIMATING FAULTS MODES IN BALL BEARING MACHINERY USING A SPARSE RECONSTRUCTION FRAMEWORK.....	2330
<i>Maria Juhlin ; Johan Swärd ; Marius Pesavento ; Andreas Jakobsson</i>	
A SEQUENCE-FILTER JOINT OPTIMIZATION.....	2335
<i>U. Tan ; O. Rabastc ; C. Adnet ; J.-P. Ovarlez</i>	
THE MATCHED WINDOW REASSIGNMENT	2340
<i>Maria Sandsten ; Johan Brynolfsson ; Isabella Reinhold</i>	
LEAST SQUARES AND MAXIMUM LIKELIHOOD ESTIMATION OF MIXED SPECTRA	2345
<i>Johan Brynolfsson ; Johan Swärd ; Andreas Jakobsson ; Maria Sandsten</i>	
A NOVEL METHOD FOR TOPOLOGICAL EMBEDDING OF TIME-SERIES DATA.....	2350
<i>Sean M. Kennedy ; John D. Roth ; James W. Scrofani</i>	

EAR PRESENTATION ATTACK DETECTION: BENCHMARKING STUDY WITH FIRST LENSLET LIGHT FIELD DATABASE	2355
<i>Alireza Sepas-Moghaddam ; Fernando Pereira ; Paulo Lobato Correia</i>	
PRIVACY-PRESERVING INDEXING OF IRIS-CODES WITH CANCELABLE BLOOM FILTER-BASED SEARCH STRUCTURES.....	2360
<i>P. Drozdowski ; S. Garg ; C. Rathgeb ; M. Gomez-Barrcro ; D. Chang ; C. Busch</i>	
FACE DEMORPHING IN THE PRESENCE OF FACIAL APPEARANCE VARIATIONS	2365
<i>Matteo Ferrara ; Annalisa Franco ; Davide Maltoni</i>	
FINGERPRINT MINUTIAE MATCHING THROUGH SPARSE CROSS-CORRELATION	2370
<i>Gabriel Emile Hine ; Emanuele Maiorana ; Patrizio Campisi</i>	
SPEAKER INCONSISTENCY DETECTION IN TAMPERED VIDEO.....	2375
<i>Pavel Korshunov ; Sébastien Marcel</i>	
COMPARATIVE STUDY ON UNIVARIATE FORECASTING METHODS FOR METEOROLOGICAL TIME SERIES.....	2380
<i>Thi-Thu-Hong Phan ; Émilie Poisson Caillault ; André Bigand</i>	
A NEW BLIND BEAMFORMING TECHNIQUE FOR THE ALIGNMENT AND ENHANCEMENT OF SEISMIC SIGNALS	2385
<i>Erion-Vasilis Pikoulis ; Emmanouil Z. Psarakis</i>	
AN IMPROVED CSI BASED DEVICE FREE INDOOR LOCALIZATION USING MACHINE LEARNING BASED CLASSIFICATION APPROACH	2390
<i>Tahsina Farah Sanam ; Hana Godrich</i>	
BINARY SEQUENCES SET WITH SMALL ISL FOR MIMO RADAR SYSTEMS	2395
<i>Mohammad Alaae-Kerahroodi ; Mahmoud Modarres-Hashemi ; Mohammad Mahdi Naghsh ; Bhavani Shankar ; Björn Ottersten</i>	
DC-OFFSET ESTIMATION OF MULTIPLE CW MICRO DOPPLER RADAR	2400
<i>Dong Kyoo Kim ; You Jin Kim</i>	
SEPARATION OF ANTHROPOGENIC NOISE AND EXTREMELY LOW FREQUENCY NATURAL MAGNETIC FIELD USING STATISTICAL FEATURES	2405
<i>Jesús Rodríguez-Camacho ; David Blanco-Navarro ; Juan Franciso Gómez-Lepera ; Jesús Fornieles-Callejón ; M. Carmen Carrión</i>	
MOSQUITO WINGBEAT ANALYSIS AND CLASSIFICATION USING DEEP LEARNING.....	2410
<i>Eleftherios Fanioudakis ; Matthias Geismar ; Ilyas Potamitis</i>	
PARAMETERS ESTIMATION OF ULTRASONICS ECHOES USING THE CUCKOO SEARCH AND ADAPTIVE CUCKOO SEARCH ALGORITHMS.....	2415
<i>Farid Chibane ; Abdessalem Benammar ; Redouane Draï</i>	
ULTRASONIC BASED PROXIMITY DETECTION FOR HANDSETS.....	2419
<i>Pablo Peso Parada ; Rahim Saeidi</i>	
IMPROVED DIRECT-PATH DOMINANCE TEST FOR SPEAKER LOCALIZATION IN REVERBERANT ENVIRONMENTS.....	2424
<i>Lior Madmoni ; Boaz Rafaely</i>	
EVALUATION OF BINAURAL NOISE REDUCTION METHODS IN TERMS OF INTELLIGIBILITY AND PERCEIVED LOCALIZATION	2429
<i>Andreas I. Koutrouvelis ; Richard C. Hendriks ; Richard Heusdens ; Jesper Jensen ; Meng Guo</i>	
ESTIMATING POWER SPECTRAL DENSITY OF UNMANNED AERIAL VEHICLE ROTOR NOISE USING MULTISENSORY INFORMATION.....	2434
<i>Benjamin Yen ; Yusuke Hioka ; Brian Mace</i>	
ACOUSTIC SCENE ANALYSIS USING PARTIALLY CONNECTED MICROPHONES BASED ON GRAPH CEPSTRUM.....	2439
<i>Keisuke Imoto</i>	
CONVOLUTIONAL RECURRENT NEURAL NETWORKS FOR URBAN SOUND CLASSIFICATION USING RAW WAVEFORMS	2444
<i>Jonghee Sang ; Soomyung Park ; Junwoo Lee</i>	
DYNAMICS AND PERIODICITY BASED MULTIRATE FAST TRANSIENT-SOUND DETECTION	2449
<i>Jun Yang ; Philip Hilmes</i>	
A CONVEX-COMBINED STEP-SIZE-BASED NORMALIZED MODIFIED FILTERED-X LEAST MEAN SQUARE ALGORITHM FOR IMPULSIVE ACTIVE NOISE CONTROL SYSTEMS	2454
<i>Muhammad Tahir Akhtar</i>	
LOSSY AUDIO COMPRESSION IDENTIFICATION.....	2459
<i>Bongjun Kim ; Zafar Rafii</i>	

MISSING SAMPLE ESTIMATION BASED ON HIGH-ORDER SPARSE LINEAR PREDICTION FOR AUDIO SIGNALS	2464
<i>Bisrat Derebssa Dufera ; Koen Eneman ; Toon Van Waterschoot</i>	
PARAMETER DOMAIN LOUDNESS ESTIMATION IN PARAMETRIC AUDIO OBJECT CODING	2469
<i>Jouni Paulus</i>	
AN EXTENDED KALMAN FILTER FOR RTF ESTIMATION IN DUAL-MICROPHONE SMARTPHONES	2474
<i>Juan M. Martín-Doñas ; Iván López-Espejo ; Angel M. Gomez ; Antonio M. Peinado</i>	
MODEL BASED ESTIMATION OF STP PARAMETERS FOR BINAURAL SPEECH ENHANCEMENT	2479
<i>Mathew Shaji Kavalekalam ; Jesper Kjør Nielsen ; Mads Græsboll Christensen ; Jesper Boldt</i>	
PIANO LEGATO-PEDAL ONSET DETECTION BASED ON A SYMPATHETIC RESONANCE MEASURE	2484
<i>Beici Liang ; György Fazekas ; Mark Sandler</i>	
RANDOMLY SKETCHED SPARSE SUBSPACE CLUSTERING FOR ACOUSTIC SCENE CLUSTERING	2489
<i>Shuoyang Li ; Wenwu Wang</i>	
ANOMALOUS SOUND EVENT DETECTION BASED ON WAVENET	2494
<i>Tomoki Hayashi ; Tatsuya Komatsu ; Reishi Kondo ; Tomoki Toda ; Kazuya Takeda</i>	
PERFORMANCE ANALYSIS OF THE COVARIANCE-WHITENING AND THE COVARIANCE-SUBTRACTION METHODS FOR ESTIMATING THE RELATIVE TRANSFER FUNCTION	2499
<i>Shmulik Markovich-Golan ; Sharon Gannet ; Walter Kellermann</i>	
OPERATIONAL RATE-CONSTRAINED BEAMFORMING IN BINAURAL HEARING AIDS	2504
<i>Jamal Amini ; Richard C. Hendriks ; Richard Heusdens ; Meng Guo ; Jesper Jensen</i>	
MODULATION-DOMAIN PARAMETRIC MULTICHANNEL KALMAN FILTERING FOR SPEECH ENHANCEMENT	2509
<i>Wei Xue ; Alastair H. Moore ; Mike Brookes ; Patrick A. Naylor</i>	
GENERATIVE ADVERSARIAL NETWORK-BASED APPROACH TO SIGNAL RECONSTRUCTION FROM MAGNITUDE SPECTROGRAM	2514
<i>Keisuke Oyamada ; Hirokazu Kameoka ; Takuhiro Kaneko ; Kou Tanaka ; Nobukatsu Hojo ; Hiroyasu Ando</i>	
BITRATE AND TANDEM DETECTION FOR THE AMR-WB CODEC WITH APPLICATION TO NETWORK TESTING	2519
<i>Tobias Hübschen ; Gerhard Schmidt</i>	
ANOMALY DETECTION BASED ON FEATURE RECONSTRUCTION FROM SUBSAMPLED AUDIO SIGNALS	2524
<i>Yohei Kawaguchi</i>	
PERCEIVED QUALITY OF AUDIO-VISUAL STIMULI CONTAINING STREAMING AUDIO DEGRADATIONS	2529
<i>Helard Martinez ; Mylène C.Q. Farias ; Andrew Hines</i>	
USING ACOUSTIC PARAMETERS FOR INTELLIGIBILITY PREDICTION OF REVERBERANT SPEECH	2534
<i>Ahmed Alghamdi ; Wai-Yip Chan ; Daniel Fogerty</i>	
LOCALIZATION IN ELEVATION WITH NON-INDIVIDUAL HEAD-RELATED TRANSFER FUNCTIONS: COMPARING PREDICTIONS OF TWO AUDITORY MODELS	2539
<i>Roberto Barumerli ; Michele Geronazzo ; Federico Avanzini</i>	
GEVD BASED SPEECH AND NOISE CORRELATION MATRIX ESTIMATION FOR MULTICHANNEL WIENER FILTER BASED NOISE REDUCTION	2544
<i>Robbe Van Rompaey ; Marc Moonen</i>	
EXTERIOR AND INTERIOR SOUND FIELD SEPARATION USING CONVEX OPTIMIZATION: COMPARISON OF SIGNAL MODELS	2549
<i>Yuhta Takida ; Shoichi Koyama ; Hiroshi Saruwataril</i>	
MULTIPLE CYBER-THREATS CONTAINMENT VIA KENDALL'S BIRTH-DEATH-IMMIGRATION MODEL	2554
<i>Vincenzo Matta ; Mario Di Mauro ; Maurizio Longo ; Alfonso Farina</i>	
BLIND CHANNEL DIRECTION SEPARATION AGAINST PILOT SPOOFING ATTACK IN MASSIVE MIMO SYSTEM	2559
<i>Ruohan Cao ; Tan F. Wong ; Hui Gao ; Dongqing Wang ; Yueming Lu</i>	
ADS-B SIGNAL SIGNATURE EXTRACTION FOR INTRUSION DETECTION IN THE AIR TRAFFIC SURVEILLANCE SYSTEM	2564
<i>Mauro Leonardi ; Davide Di Fausto</i>	

ESTIMATING SECRET PARAMETERS OF A RANDOM NUMBER GENERATOR FROM TIME SERIES BY AUTO-SYNCHRONIZATION	2569
<i>Salih Ergün</i>	
AUTHENTICATION OF GALILEO GNSS SIGNAL BY SUPERIMPOSED SIGNATURE WITH ARTIFICIAL NOISE	2573
<i>Francesco Formaggio ; Stefano Tomasin ; Gianluca Caparra ; Silvia Ceccato ; Nicola Laurenti</i>	
PRIVACY-PRESERVING IDENTIFICATION VIA LAYERED SPARSE CODE DESIGN: DISTRIBUTED SERVERS AND MULTIPLE ACCESS AUTHORIZATION	2578
<i>Behrooz Razeghi ; Slava Voloshynovskiy ; Sohrab Ferdowsi ; Dimche Kostadinov</i>	
ROBUST EXPECTATION PROPAGATION IN FACTOR GRAPHS INVOLVING BOTH CONTINUOUS AND BINARY VARIABLES	2583
<i>Marco Cox ; Bert De Vries</i>	
PREDICTION METHODS FOR TIME EVOLVING DYADIC PROCESSES	2588
<i>Myrsini Ntemi ; Constantine Kotropoulos</i>	
ACCELERATED STOCHASTIC MULTIPLICATIVE UPDATE WITH GRADIENT AVERAGING FOR NONNEGATIVE MATRIX FACTORIZATIONS	2593
<i>Hiroyuki Kasai</i>	
DECISION LEVEL FUSION: AN EVENT DRIVEN APPROACH	2598
<i>Siddharth Roheda ; Hamid Krim ; Zhi-Quan Luo ; Tianfu Wu</i>	
ENTRY-WISE MATRIX COMPLETION FROM NOISY ENTRIES	2603
<i>Zahra Sabetsarvestani ; Franz Kiraly ; R. Miguel ; D. Rodrigues</i>	
A NOVEL FORMULATION OF INDEPENDENCE DETECTION BASED ON THE SAMPLE CHARACTERISTIC FUNCTION	2608
<i>Ferran De Cabrera ; Jaume Riba</i>	
HIGH-ORDER CPD ESTIMATION WITH DIMENSIONALITY REDUCTION USING A TENSOR TRAIN MODEL	2613
<i>Yassine Zniyed ; Remy Boyer ; Andre L.F. De Almeida ; Gerard Favier</i>	
SUBSPACE-ORBIT RANDOMIZED - BASED DECOMPOSITION FOR LOW-RANK MATRIX APPROXIMATIONS	2618
<i>Maboud F. Kaloorazi ; Rodrigo C. De Lamare</i>	
FEATURE FUSION VIA TENSOR NETWORK SUMMATION	2623
<i>Giuseppe G. Calvi ; Ilia Kisil ; Danilo P. Mandic</i>	
A NOVEL ONLINE GENERALIZED POSSIBILISTIC CLUSTERING ALGORITHM FOR BIG DATA PROCESSING	2628
<i>Spyridoula D. Xenaki ; Konstantinos D. Koutroumbas ; Athanasios A. Rontogiannis</i>	
TECHNIQUES FOR GRAVITATIONAL-WAVE DETECTION OF COMPACT BINARY COALESCENCE	2633
<i>Sarah Caudill</i>	
GPU-OPTIMISED LOW-LATENCY ONLINE SEARCH FOR GRAVITATIONAL WAVES FROM BINARY COALESCENCES	2638
<i>Xiaoyang Guo ; Qi Chu ; Zhihui Du ; Linqing Went</i>	
DETECTION AND ESTIMATION OF UNMODELED CHIRPS	2643
<i>Soumya D. Mohanty</i>	
WAVELET-BASED CLASSIFICATION OF TRANSIENT SIGNALS FOR GRAVITATIONAL WAVE DETECTORS	2648
<i>Elena Cuoco ; Massimiliano Razzano ; Andrei Utina</i>	
THE BAND-SAMPLED-DATA COLLECTION FOR THE SEARCH OF CONTINUOUS GRAVITATIONAL WAVE SIGNALS	2653
<i>Ornella Juliana Piccinni ; Sergio Frasca</i>	
NON-PARAMETRIC CHARACTERIZATION OF GRAVITATIONAL-WAVE POLARIZATIONS	2658
<i>Julien Flamant ; Pierre Chainais ; Eric Chassande-Mottin ; Fangchen Feng ; Nicolas Le Bihan</i>	
BEAM SHAPE CALIBRATION FOR MULTI-BEAM RADIO ASTRONOMICAL PHASED ARRAYS	2663
<i>Stefan J. Wijnholds</i>	
UNCERTAINTY QUANTIFICATION IN IMAGING: WHEN CONVEX OPTIMIZATION MEETS BAYESIAN ANALYSIS	2668
<i>Audrey Repetti ; Marcelo Pereyra ; Yves Wiaux</i>	
BAYESIAN CALIBRATION USING DIFFERENT PRIOR DISTRIBUTIONS: AN ITERATIVE MAXIMUM A POSTERIORI APPROACH FOR RADIO INTERFEROMETERS	2673
<i>V. Ollier ; M. N. El Corso ; A. Ferrari ; R. Boyer ; P. Larzabal</i>	

FACET-BASED REGULARIZATION FOR SCALABLE RADIO-INTERFEROMETRIC IMAGING	2678
<i>Shahrzad Naghibzadeh ; Audrey Repetti ; Alle-Jan Van Der Veen ; Yves Wiaux</i>	
RADIO IMAGING WITH INFORMATION FIELD THEORY	2683
<i>Philipp Arras ; Jakob Knollr Müller ; Henrik Junklewitz ; Torsten A. Enßlin</i>	
EFFICIENT CALIBRATION OF RADIO INTERFEROMETERS USING BLOCK LDU DECOMPOSITION	2688
<i>Ahmad Mouri Sardarabadi ; Aile-Jan Van Der Veen ; Léon V. E. Koopmans</i>	
Author Index	