

2019 27th European Signal Processing Conference (EUSIPCO 2019)

**A Coruña, Spain
2 – 6 September 2019**

Pages 1-777



**IEEE Catalog Number: CFP1940S-POD
ISBN: 978-1-5386-7300-3**

**Copyright © 2019, 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:	CFP1940S-POD
ISBN (Print-On-Demand):	978-1-5386-7300-3
ISBN (Online):	978-9-0827-9703-9
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

DATA AUGMENTATION USING GENERATIVE ADVERSARIAL NETWORK FOR ENVIRONMENTAL SOUND CLASSIFICATION	1
<i>Aswathy Madhu ; Suresh Kumaraswamy</i>	
SOS BOOSTING FOR IMAGE DEBLURRING ALGORITHMS	6
<i>Shahar Romem Peled ; Yaniv Romano ; Michael Elad</i>	
REDUCED COMPLEXITY MAXIMUM LIKELIHOOD DETECTOR FOR DFT-S-SEFDM SYSTEMS	11
<i>Tong Wu ; Ryan Grammenos</i>	
LOW-COMPLEXITY SWITCHING NETWORK DESIGN FOR HYBRID PRECODING IN MMWAVE MIMO SYSTEMS	16
<i>Francesc Molina ; Jordi Borràs</i>	
MIMO RECEIVER WITH REDUCED NUMBER OF RF CHAINS BASED ON 4D ARRAY AND SOFTWARE DEFINED RADIO	21
<i>Grzegorz Bogdan ; Konrad Godziszewski ; Yevhen Yashchyshyn</i>	
SOURCE ENUMERATION IN NON-WHITE NOISE AND SMALL SAMPLE SIZE VIA SUBSPACE AVERAGING	26
<i>Vaibhav Garg ; Ignacio Santamaria</i>	
ESTIMATION OF MEASUREMENT-NOISE VARIANCE FOR VARIABLE-STEP-SIZE NLMS FILTERS	31
<i>Tilo Strutz</i>	
INTERSYMBOL AND INTERCARRIER INTERFERENCE IN OFDM TRANSMISSIONS THROUGH HIGHLY DISPERSIVE CHANNELS	36
<i>Wallace Alves Martins ; Fernando Cruz-Roldán ; Marc Moonen ; Paulo Sergio Ramirez Diniz</i>	
SENSOR SELECTION AND RATE DISTRIBUTION BASED BEAMFORMING IN WIRELESS ACOUSTIC SENSOR NETWORKS	41
<i>Jie Zhang ; Richard Heusdens ; Richard C. Hendriks</i>	
IMAGING EXPERIMENT OF MULTI-PINHOLE BASED X-RAY FLUORESCENCE COMPUTED TOMOGRAPHY USING RAT HEAD PHANTOMS	46
<i>Tenta Sasaya ; Tsuyoshi Oouchi ; Tetsuya Yuasa ; Seung-Jun Seo ; Jae-Geun Jeon ; Jong-Ki Kim ; Naoki Sunaguchi ; Kazuyuki Hyodo ; Tsutomu Zeniya</i>	
ASYMPTOTIC KARLIN-RUBIN'S THEOREM WITH APPLICATION TO SIGNAL DETECTION IN A SUBSPACE CONE	50
<i>Sabrina Bourmani ; Francois-Xavier Socheleau ; Dominique Pastor</i>	
INTEGRATION OF HIGH SPEED TRAIN CHANNEL MEASUREMENTS IN SYSTEM LEVEL SIMULATIONS	55
<i>Martin Klaus Müller ; Tomás Domínguez-Bolaño ; José A. García-Naya ; Luis Castedo ; Markus Rupp</i>	
SOUNDING INDUSTRY: CHALLENGES AND DATASETS FOR INDUSTRIAL SOUND ANALYSIS	60
<i>Sascha Grollmisch ; Jakob Abeßer ; Judith Liebetrau ; Hanna Lukashevich</i>	
END-TO-END AUDIO CLASSIFICATION WITH SMALL DATASETS – MAKING IT WORK	65
<i>Maximilian Schmitt ; Björn Schuller</i>	
SCALE-DISCRETISED RIDGELET TRANSFORM ON THE SPHERE	70
<i>Jason D. McEwen ; Matthew A. Price</i>	
ALL-POWERFUL LEARNING ALGORITHM FOR THE PRIORITY ACCESS IN COGNITIVE NETWORK	75
<i>M. Almasri ; A. Mansour ; C. Moy ; A. Assoum ; C. Osswald ; D. Le Jeune</i>	
QUANTIFYING UNCERTAINTY IN HIGH DIMENSIONAL INVERSE PROBLEMS BY CONVEX OPTIMISATION	80
<i>Xiaohao Cai ; Marcelo Pereyra ; Jason D. McEwen</i>	
PERMUTATION ALIGNMENT BASED ON MUSIC SPECTRUM DISCREPANCY FOR BLIND SOURCE SEPARATION	85
<i>Yuuki Tachioka</i>	
DEEP LEARNING MODELS FOR DENOISING ECG SIGNALS	90
<i>Corneliu T. C. Arsenie ; Richard Hankins ; Hujun Yin</i>	
IMPROVED WAVEFORMS FOR TIME-EFFICIENT RADAR RANGE MEASUREMENT DISAMBIGUATION	95
<i>Alexander Michael Daniel</i>	

SPECTROGRAM FEATURE LOSSES FOR MUSIC SOURCE SEPARATION	100
<i>Abhimanyu Sahai ; Romann Weber ; Brian McWilliams</i>	
LOW-COMPLEXITY OPTIMIZATION FOR DIRECTION-OF-ARRIVAL ESTIMATION VIA APPROXIMATE MESSAGE PASSING	105
<i>Xinyu Zhang ; Kai Huo ; Shuanghui Zhang ; Yongxiang Liu ; Weidong Jiang ; Xiang Li</i>	
A ROBUST GROUP-SPARSE PROPORTIONATE AFFINE PROJECTION ALGORITHM WITH MAXIMUM CORRENTROPY CRITERION FOR CHANNEL ESTIMATION	110
<i>Zhengxiong Jiang ; Yingsong Li ; Yuriy Zakharov</i>	
EXTENDING ARCHITECTURE MODELING FOR SIGNAL PROCESSING TOWARDS GPUS	115
<i>Saman Payvar ; Jani Boutellier ; Antoine Morvan ; Claudio Rubattu ; Maxime Pelcat</i>	
ON DETECTING AND HANDLING TARGET OCCLUSIONS IN CORRELATION-FILTER-BASED 2D TRACKING	120
<i>Iason Karakostas ; Vasileios Mygdalis ; Anastasios Tefas ; Ioannis Pitas</i>	
EXCITNET VOCODER: A NEURAL EXCITATION MODEL FOR PARAMETRIC SPEECH SYNTHESIS SYSTEMS	125
<i>Eunwoo Song ; Kyungguen Byun ; Hong-Goo Kang</i>	
ACOUSTIC SOURCE POSITION ESTIMATION BASED ON MULTI-FEATURE GAUSSIAN PROCESSES	130
<i>Andreas Brendel ; Ingo Altmann ; Walter Kellermann</i>	
OFFLINE NOISE REDUCTION USING OPTIMAL MASS TRANSPORT INDUCED COVARIANCE INTERPOLATION	135
<i>Filip Elvander ; Randall Ali ; Andreas Jakobsson ; Toon Van Waterschoot</i>	
A LOCALIZED NO-REFERENCE BLURRINESS MEASURE FOR OMNIDIRECTIONAL IMAGES AND VIDEO	140
<i>Hannes Fassold ; Stephanie Wechtitsch</i>	
ADAPTIVE PRE-WHITENING BASED ON PARAMETRIC NMF	145
<i>Alfredo Esquivel Jaramillo ; Jesper Kjaer Nielsen ; Mads Græsbøll Christensen</i>	
EFFICIENT FEATURE EXTRACTION FOR PERSON RE-IDENTIFICATION VIA DISTILLATION	150
<i>Francisco Salgado ; Rakesh Mehta ; Paulo Lobato Correia</i>	
HYBRID OCTREE-PLANE POINT CLOUD GEOMETRY CODING	155
<i>Antoine Dricot ; João Ascenso</i>	
NLS ALGORITHM FOR KRONECKER-STRUCTURED LINEAR SYSTEMS WITH A CPD CONSTRAINED SOLUTION	160
<i>Martijn Boussé ; Nikos Sidiropoulos ; Lieven De Lathauwer</i>	
IMPROVED LOSSLESS IMAGE COMPRESSION USING ADAPTIVE IMAGE ROTATION	165
<i>Phillip Möller ; Tilo Strutz</i>	
NEW ALGORITHMS ON COMPLEX JOINT EIGENVALUE DECOMPOSITION BASED ON GENERALIZED GIVENS ROTATIONS	169
<i>Ammar Mesloub ; Adel Belouchrani ; Karim Abed-Meraim</i>	
VARIATIONAL INFERENCE FOR DOA ESTIMATION IN REVERBERANT CONDITIONS	174
<i>Yosef Soussana ; Sharon Gannot</i>	
PERFORMANCE ANALYSIS OF DIFFUSION FILTERED-X ALGORITHMS IN MULTITASK ANC SYSTEMS	179
<i>Y. J. Chu ; S. C. Chan ; Y. Zhao ; M. Wu</i>	
LOW COMPLEXITY ROBUST ADAPTIVE BEAMFORMER BASED ON PARALLEL RLMS AND KALMAN RLMS	184
<i>Ghathas Akkad ; Ali Mansour ; Bachar A. Elhassan ; Jalal Srar ; Mohamad Najem ; Frédéric Le Roy</i>	
CHANNEL HARDENING, FAVORABLE EQUALIZATION AND PROPAGATION IN WIDEBAND MASSIVE MIMO	189
<i>Davide Dardari</i>	
TRACKING THEORY OF ADAPTIVE FILTERS WITH INPUT-OUTPUT SAMPLING RATE OFFSET	194
<i>Philipp Thüine ; GeraldENZner</i>	
FAST BASIS FUNCTION ESTIMATORS FOR IDENTIFICATION OF NONSTATIONARY STOCHASTIC PROCESSES	199
<i>Maciej Niedzwiecki ; Marcin Ciolek ; Artur Gancza</i>	
SECOND-ORDER TIME-REASSIGNED SYNCHROQUEEZING TRANSFORM: APPLICATION TO DRAUPNER WAVE ANALYSIS	204
<i>Dominique Fourer ; François Auger</i>	

CONCATENATED IDENTICAL DNN (CI-DNN) TO REDUCE NOISE-TYPE DEPENDENCE IN DNN-BASED SPEECH ENHANCEMENT	209
<i>Ziyi Xu ; Maximilian Strake ; Tim Fingscheidt</i>	
RANDOM FOREST ON AN EMBEDDED DEVICE FOR REAL-TIME MACHINE STATE CLASSIFICATION.....	214
<i>Fabian Küppers ; Jonas Albers ; Anselm Haselhoff</i>	
ESTIMATING & MITIGATING THE IMPACT OF ACOUSTIC ENVIRONMENTS ON MACHINE-TO-MACHINE SIGNALLING	219
<i>Amogh Matt ; Dan Stowell</i>	
A NOVEL DESIGN METHOD FOR DIGITAL FIR/IIR FILTERS BASED ON THE SHUFFLE FROG-LEAPING ALGORITHM.....	224
<i>Daniel Jiménez-Galindo ; Pablo Casaseca-De-La-Higuera ; Luis M. San-José-Revuelta</i>	
NON-INTRUSIVE POLQA ESTIMATION OF SPEECH QUALITY USING RECURRENT NEURAL NETWORKS	229
<i>Dushyant Sharma ; Aidan O. T. Hogg ; Yu Wang ; Amr Nour-Eldin ; Patrick A. Naylor</i>	
IMPROVING FISTA'S SPEED OF CONVERGENCE VIA A NOVEL INERTIAL SEQUENCE	234
<i>Paul Rodriguez</i>	
A SIMPLE SPARSITY-AWARE FEATURE LMS ALGORITHM	239
<i>Gabriel S. Chaves ; Markus V. S. Lima ; Hamed Yazdanpanah ; Paulo S. R. Diniz ; Tadeu N. Ferreira</i>	
ACOUSTIC SIMULATION IN DYNAMIC ENVIRONMENTS FOR ROBOT AUDITION.....	244
<i>Zhaofeng Zhang ; Kazuhiro Nakadai ; Hirofumi Nakajima ; Naoaki Sumida</i>	
REDUCING THE BIAS IN DRSS-BASED LOCALIZATION: AN INSTRUMENTAL VARIABLE APPROACH	249
<i>Jun Li ; Kutluyil Dogançay ; Ngoc Hung Nguyen ; Yee Wei Law</i>	
EARLY SKIP MODE DECISION METHOD IN HEVC BASED ON PERCEPTUAL DISTORTION MEASURE	254
<i>Jieon Kim ; Ebroul Izquierdo</i>	
SHUFFLING FOR UNDERSTANDING MULTIFRACTALITY, APPLICATION TO ASSET PRICE TIME SERIES	259
<i>Patrice Abry ; Yannick Malevergne ; Herwig Wendt ; Marc Sennereet ; Laurent Jaffrès ; Blaise Liaustrat</i>	
DATA PREPROCESSING FOR ANN-BASED INDUSTRIAL TIME-SERIES FORECASTING WITH IMBALANCED DATA	264
<i>Ivan Pisa ; Ignacio Santín ; Jose Lopez Vicario ; Antoni Morell ; Ramon Vilanova</i>	
ROBUST TOA-BASED LOCALIZATION IN A MIXED LOS/NLOS ENVIRONMENT USING HYBRID MAPPING TECHNIQUE	269
<i>Sanaa S. A. Al-Samahi ; K. C. Ho ; N. E. Islam</i>	
SCHEDULING MOLDABLE PARALLEL STREAMING TASKS ON HETEROGENEOUS PLATFORMS WITH FREQUENCY SCALING	274
<i>Sebastian Litzinger ; Jörg Keller ; Christoph Kessler</i>	
ADAPTIVE BEAMFORMING BASED ON TIME MODULATED ARRAY WITH HARMONIC CHARACTERISTIC ANALYSIS.....	279
<i>Chong He ; Guanli Yi ; Jingfeng Chen</i>	
LTE RANGING MEASUREMENT USING UPLINK OPPORTUNISTIC SIGNALS AND THE SAGE ALGORITHM.....	284
<i>A. Pin ; R. Rinaldo ; A. Tonello ; C. Marshall ; M. Driusso ; A. Biason ; A. Dalla Torre</i>	
INDOOR SOUND SOURCE LOCALIZATION BASED ON SPARSE BAYESIAN LEARNING AND COMPRESSED DATA	289
<i>Zonglong Bai ; Jinwei Sun ; Jesper Rindom Jensen ; Mads Græsbøll Christensen</i>	
A SELF-TUNED ARCHITECTURE FOR HUMAN ACTIVITY RECOGNITION BASED ON A DYNAMICAL RECURRENCE ANALYSIS OF WEARABLE SENSOR DATA.....	294
<i>M.-A. Zervou ; G. Tzagkarakis ; A. Panousopoulou ; P. Tsakalides</i>	
IDENTIFY OF SPATIAL SIMILARITY OF ELECTROENCEPHALOGRAPHY (EEG) DURING WORKING-MEMORY MAINTENANCE	299
<i>Yufan Song ; Zhifeng Zhang ; Te Hu ; Xiaoliang Gong ; Asoke K. Nandi</i>	
INFINITE IMPULSE RESPONSE ECHO CANCELLER IN STFT DOMAIN FOR REVERBERANT ENVIRONMENTS.....	304
<i>Amos Schreiberman ; Shmulik Markovich-Golan</i>	
SHUFFLED BITS IN THE LOW-DETECTABILITY REGIME.....	309
<i>Stefano Marano ; Peter Willett</i>	
MEMORY-OPTIMIZED VORONOI CELL-BASED PARALLEL KERNELS FOR THE SHORTEST VECTOR PROBLEM ON LATTICES.....	314
<i>Filipe Cabeleira ; Artur Mariano ; Gabriel Falcao</i>	

SAMPLING RATE AND BITS PER SAMPLE TRADEOFF FOR CLOUD MIMO RADAR TARGET DETECTION	319
<i>Zhen Wang ; Qian He ; Rick S. Blum</i>	
WGANSING: A MULTI-VOICE SINGING VOICE SYNTHESIZER BASED ON THE WASSERSTEIN-GAN	324
<i>Pritish Chandna ; Merlijn Blaauw ; Jordi Bonada ; Emilia Gómez</i>	
LEARNING METHODS FOR RSSI-BASED GEOLOCATION: A COMPARATIVE STUDY	329
<i>Kevin Elgui ; Pascal Bianchi ; François Portier ; Olivier Isson</i>	
TWO-CHANNEL PASSIVE DETECTION EXPLOITING CYCLOSTATIONARITY	334
<i>Stefanie Horstmann ; David Ramírez ; Peter J. Schreier</i>	
ADAPTIVE LOCALIZED CAYLEY PARAMETRIZATION TECHNIQUE FOR SMOOTH OPTIMIZATION OVER THE STIEFEL MANIFOLD	339
<i>Keita Kume ; Isao Yamada</i>	
SEMIDEFINITE PROGRAMMING FOR MIMO RADAR TARGET LOCALIZATION USING BISTATIC RANGE MEASUREMENTS	344
<i>Hongyi Wang ; Bingbing Zhang ; Liming Zheng ; Jianfei Wu</i>	
TENSOR NETWORK KALMAN FILTER FOR LTI SYSTEMS	349
<i>Daniel Gedon ; Pieter Piscaer ; Kim Batselier ; Carlas Smith ; Michel Verhaegen</i>	
A NOVEL RECURRENT NEURAL NETWORK ARCHITECTURE FOR CLASSIFICATION OF ATRIAL FIBRILLATION USING SINGLE-LEAD ECG	354
<i>Rohan Banerjee ; Avik Ghose ; Sundeep Khandelwal</i>	
DEEP SPATIO-TEMPORAL MODELING FOR OBJECT-LEVEL GAZE-BASED RELEVANCE ASSESSMENT	359
<i>Konstantinos Stavridis ; Athanasios Psaltis ; Anastasios Dimou ; Georgios Th. Papadopoulos ; Petros Daras</i>	
CROSS-DOMAIN KNOWLEDGE TRANSFER SCHEMES FOR 3D HUMAN ACTION RECOGNITION	364
<i>Athanasios Psaltis ; Georgios Th. Papadopoulos ; Petros Daras</i>	
TENSMIL2: IMPROVED MULTIPLE INSTANCE CLASSIFICATION THROUGH TENSOR DECOMPOSITION AND INSTANCE SELECTION	369
<i>Thomas Papastergiou ; Evangelia I. Zacharaki ; Vasileios Megalooikonomou</i>	
DISCRIMINATIVE JOINT VECTOR AND COMPONENT REDUCTION FOR GAUSSIAN MIXTURE MODELS	374
<i>Yossi Bar-Yosef ; Yuval Bistriz</i>	
FEASIBILITY OF LTE FOR TRAIN CONTROL IN SUBWAY ENVIRONMENTS BASED ON EXPERIMENTAL DATA	379
<i>Ángel Carro-Lagoa ; Tomás Domínguez-Bolaño ; José Rodríguez-Piñeiro ; Miguel González-López ; José A. García-Naya</i>	
COMPARISON OF PARAMETER ESTIMATION METHODS FOR SINGLE-MICROPHONE MULTI-FRAME WIENER FILTERING	384
<i>Dörte Fischer ; Klaus Brümmer ; Simon Doclo</i>	
A GRAPH SIGNAL PROCESSING APPROACH TO DIRECTION OF ARRIVAL ESTIMATION	389
<i>Leandro A. S. Moreira ; António L. L. Ramos ; Marcello L. R. De Campos ; José A. Apolinário ; Felipe G. Serrenho</i>	
THE RECEPTIVE FIELD AS A REGULARIZER IN DEEP CONVOLUTIONAL NEURAL NETWORKS FOR ACOUSTIC SCENE CLASSIFICATION	394
<i>Khaled Koutini ; Hamid Eghbal-Zadeh ; Matthias Dorfer ; Gerhard Widmer</i>	
ON INTERFERENCE PIKES IN POISSON NETWORKS	399
<i>Mahin K. Atiq ; Udo Schilcher ; Christian Bettstetterl</i>	
PRIVACY-PRESERVING DISTRIBUTED AVERAGE CONSENSUS BASED ON ADDITIVE SECRET SHARING	404
<i>Qiongxiu Li ; Ignacio Cascudo ; Mads Graesbøll Christensen</i>	
STATISTICAL MODELING OF THE PATCHES DC COMPONENT FOR LOW-FREQUENCY NOISE REDUCTION	409
<i>Antoine Houdard</i>	
A PRIVACY-PRESERVING ASYNCHRONOUS AVERAGING ALGORITHM BASED ON SHAMIR'S SECRET SHARING	414
<i>Qiongxiu Li ; Mads Graesbøll Christensen</i>	
VOLUMETRIC SURFACE-GUIDED GRAPH-BASED SEGMENTATION OF CARDIAC ADIPOSE TISSUES ON FAT-WATER MR IMAGES	419
<i>Faezeh Fallah ; Karim Armanious ; Bin Yang ; Fabian Bamberg</i>	
PARAMETER-FREE SMALL VARIANCE ASYMPTOTICS FOR DICTIONARY LEARNING	424
<i>Hong-Phuong Dang ; Clément Elvira</i>	

CLASSIFICATION OF BRAINWAVES USING CONVOLUTIONAL NEURAL NETWORK	429
<i>Swapnil R. Joshi ; Drew B. Headley ; K. C. Ho ; Denis Paré ; Satish S. Nair</i>	
ON ACOUSTIC MODELING FOR BROADBAND BEAMFORMING	434
<i>Amit Chhetri ; Mohamed Mansour ; Wontak Kim ; Guangdong Pan</i>	
ESPRIT ANGLES-OF-ARRIVAL ESTIMATION WITH MISSING SENSOR DATA	439
<i>Langford B. White ; Trevor Jackson</i>	
COMPUTATIONAL ACCELERATION AND SMART INITIALIZATION OF FULL-RANK SPATIAL COVARIANCE ANALYSIS	444
<i>Hiroshi Sawada ; Rintaro Ikeshita ; Nobutaka Ito ; Tomohiro Nakatani</i>	
SENSOR FUSION FOR LEARNING-BASED TRACKING OF CONTROLLER MOVEMENT IN VIRTUAL REALITY	449
<i>Chen Song ; Shuayb Zarar</i>	
POWER-EFFICIENT SECURE BEAMFORMING IN COGNITIVE SATELLITE-TERRESTRIAL NETWORKS	454
<i>Weixin Lu ; Kang An ; Xiaojuan Yan ; Tao Liang</i>	
CLEAN SPEECH AE-DNN PSD CONSTRAINT FOR MCLP BASED REVERBERANT SPEECH ENHANCEMENT	459
<i>Srikanth Raj Chetupalli ; Thippur V. Sreenivas</i>	
WAVEFORM OPTIMIZATION FOR FDA RADAR	464
<i>Nitsan Rubinshtein ; Joseph Tabrikian</i>	
BAYESIAN TIME-DOMAIN MULTIPLE SOUND SOURCE LOCALIZATION FOR A STOCHASTIC MACHINE	469
<i>Raphael Frisch ; Marvin Faix ; Jacques Droulez ; Laurent Girin ; Emmanuel Mazer</i>	
ON THE RELATION BETWEEN DOA-VECTOR EIGENBEAM ESPRIT AND SUBSPACE PSEUDOINTENSITY-VECTOR	474
<i>Adrian Herzog ; Emanuel A. P. Habets</i>	
OUTLIER DETECTION FROM NON-SMOOTH SENSOR DATA	479
<i>Timo Huuhtanen ; Henrik Ambos ; Alexander Jung</i>	
AN IMPROVED FEATURE EXTRACTION METHOD FOR TEXTURE CLASSIFICATION WITH INCREASED NOISE ROBUSTNESS	484
<i>Stefania Ramona Barburiceanu ; Serban Meza ; Christian Germain ; Romulus Terebes</i>	
ALGORITHMS FOR PIECEWISE CONSTANT SIGNAL APPROXIMATIONS	489
<i>Leif Bergerhoff ; Joachim Weickert ; Yehuda Dar</i>	
LOSSLESS IMAGE CODING EXPLOITING LOCAL AND NON-LOCAL INFORMATION VIA PROBABILITY MODEL OPTIMIZATION	494
<i>Kyohei Unno ; Yusuke Kameda ; Ichiro Matsuda ; Susumu Itoh ; Sei Naito</i>	
OFDM SPECTRAL PRECODING WITH PER-SUBCARRIER DISTORTION CONSTRAINTS	499
<i>Khawar Hussain ; Roberto López-Valcarce</i>	
A PARALLEL OPTIMIZATION APPROACH ON THE INFINITY NORM MINIMIZATION PROBLEM	504
<i>Tianyi Liu ; Minh Trinh Hoang ; Yang Yang ; Marius Pesavento</i>	
BAYESIAN MODEL SELECTION FOR NONLINEAR ACOUSTIC ECHO CANCELLATION	509
<i>Mhd Modar Halimeh ; Andreas Brendel ; Walter Kellermann</i>	
APPLICATIONS OF PROJECTED BELIEF NETWORKS (PBN)	514
<i>Paul M. Baggenstoss</i>	
EFFICIENT PHASE-BASED ACOUSTIC TRACKING OF DRONES USING A MICROPHONE ARRAY	519
<i>Paul M. Baggenstoss ; Mark Springer ; Marc Oispuu ; Frank Kurth</i>	
LEARNING CAUSAL NETWORKS TOPOLOGY FROM STREAMING GRAPH SIGNALS	524
<i>Mircea Moscu ; Roula Nassif ; Fei Hua ; Cédric Richard</i>	
AUTOMATED FORENSIC INK DETERMINATION IN HANDWRITTEN DOCUMENTS BY CLUSTERING	529
<i>Michael Kalbitz ; Claus Vielhauer</i>	
ROBUST SUBSPACE TRACKING WITH MISSING DATA AND OUTLIERS VIA ADMM	534
<i>Le Trung Thanh ; Nguyen Viet Dung ; Nguyen Linh Trung ; Karim Abed-Meraim</i>	
VALIDATION OF BASELINE WANDER REMOVAL AND ISOELECTRIC CORRECTION IN ELECTROCARDIOGRAMS USING CLUSTERING	539
<i>Kjell Le ; Trygve Eftestøl ; Kjersti Engan ; Øyunn Kleiven ; Stein Ørn</i>	
LOW-COMPLEXITY 2-COORDINATES DESCENT FOR NEAR-OPTIMAL MMSE SOFT-OUTPUT MASSIVE MIMO UPLINK DATA DETECTION	544
<i>Pascal Seidel ; Steffen Paul ; Jochen Rust</i>	

REDUCED-COMPLEXITY DOWNLINK CELL-FREE MMWAVE MASSIVE MIMO SYSTEMS WITH FRONTHAUL CONSTRAINTS	549
<i>Guillem Femenias ; Felip Riera-Palou</i>	
PRECISE RESPONSE CONTROL OF TRANSMIT-RECEIVE TWO-DIMENSIONAL BEAMPATTERN IN FDA-MIMO RADAR	554
<i>Lan Lan ; Jingwei Xu ; Guisheng Liao ; Yuhong Zhang ; Yan Huang</i>	
EFFICIENCY OF THE BIO-INSPIRED LEAKY INTEGRATE-AND-FIRE NEURON FOR SIGNAL CODING	559
<i>Effrosyni Doutsis ; Lionel Fillatre ; Marc Antonini</i>	
DISTRIBUTED CONSENSUS-BASED EXTENDED KALMAN FILTERING: A BAYESIAN PERSPECTIVE	564
<i>Shengdi Wang ; Armin Dekorsy</i>	
TRANSIENT ANALYSIS OF PARTITIONED-BLOCK FREQUENCY-DOMAIN ADAPTIVE FILTERS	569
<i>Feiran Yang ; Gerald Enzner ; Jun Yang</i>	
PERFUSION-BASED BRAIN CONNECTIVITY: PASL VS PCASL	574
<i>Bianca De Blasi ; Anna Barnes ; Silvia Francesca Storti ; Matthias Koepp ; Gloria Menegaz ; Enrico De Vita ; Ilaria Boscolo Galazzo</i>	
VALIDATION FRAMEWORK FOR BUILDING A SPECTRUM SHARING TESTBED FOR INTEGRATED SATELLITE-TERRESTRIAL SYSTEMS : INVITED PAPER	578
<i>Marko Höyhtyä ; Mika Hoppari ; Mikko Majanen</i>	
SPATIO-TEMPORAL WAVEFORM DESIGN IN ACTIVE SENSING SYSTEMS WITH MULTILAYER TARGETS	583
<i>Ali Kariminezhad ; Aydin Sezgin</i>	
ENHANCED DIFFUSION LEARNING OVER NETWORKS	588
<i>Ricardo Merched ; Stefan Vlaski ; Ali H. Sayed</i>	
A FAST LOCAL MODE DECISION FOR THE HEVC INTRA PREDICTION BASED ON DIRECTION DETECTION	593
<i>Marcel Corrêa ; Bruno Zatt ; Daniel Palomino ; Guilherme Corrêa ; Luciano Agostini</i>	
REFINED WAVENET VOCODER FOR VARIATIONAL AUTOENCODER BASED VOICE CONVERSION	598
<i>Wen-Chin Huang ; Yi-Chiao Wu ; Hsin-Te Hwang ; Patrick Lumban Tobing ; Tomoki Hayashi ; Kazuhiro Kobayashi ; Tomoki Toda ; Yu Tsao ; Hsin-Min Wang</i>	
SPECTRUM SENSING BY HIGHER-ORDER SVM-BASED DETECTION	603
<i>Angelo Coluccia ; Alessio Fascista ; Giuseppe Ricci</i>	
REFERENCELESS PERFORMANCE EVALUATION OF AUDIO SOURCE SEPARATION USING DEEP NEURAL NETWORKS	608
<i>Emad M. Grais ; Hagen Wierstorf ; Dominic Ward ; Russell Mason ; Mark D. Plumbley</i>	
ON MULTIVARIATE NON-GAUSSIAN SCALE INVARIANCE: FRACTIONAL LÉVY PROCESSES AND WAVELET ESTIMATION	613
<i>B. Cooper Boniece ; Gustavo Didier ; Herwig Wendt ; Patrice Abry</i>	
PROBABILISTIC TENSOR TRAIN DECOMPOSITION	618
<i>Jesper L. Hinrich ; Morten Mørup</i>	
IDENTIFICATION OF VECTOR AUTOREGRESSIVE MODELS WITH GRANGER AND STABILITY CONSTRAINTS	623
<i>Bogdan Dumitrescu ; Ciprian Doru Giurcaneanu ; Yixia Ding</i>	
LAPLACE NONNEGATIVE MATRIX FACTORIZATION WITH APPLICATION TO SEMI-SUPERVISED AUDIO DENOISING	628
<i>Hiroki Tanji ; Takahiro Murakami ; Hiroyuki Kamata</i>	
ENERGY-EFFICIENT IMPROPER SIGNALING FOR K-USER INTERFERENCE CHANNELS	633
<i>Mohammad Soleymani ; Christian Lameiro ; Ignacio Santamaria ; Peter J. Schreier</i>	
RESOURCE OPTIMIZATION FOR COGNITIVE SATELLITE SYSTEMS WITH INCUMBENT TERRESTRIAL RECEIVERS	638
<i>Arthur Louchart ; Philippe Ciblat ; Paul De Kerret</i>	
WEIGHTED SUM RATE MAXIMIZATION FOR HYBRID BEAMFORMING DESIGN IN MULTI-CELL MASSIVE MIMO OFDM SYSTEMS	643
<i>Christo Kurisummoottil Thomas ; Dirk Slock</i>	
AN ALGEBRAIC FRAMEWORK FOR DIGITAL ENVELOPE MODULATION	648
<i>Simon Bicaïs ; Jean-Baptiste Doré</i>	
MODELLING MISMATCH AND NOISE STATISTICS UNCERTAINTY IN LINEAR MMSE ESTIMATION	653
<i>Jordi Vilà-Valls ; Eric Chaumette ; François Vincent ; Pau Closas</i>	

DISCRETE-VALUED VECTOR RECONSTRUCTION BY OPTIMIZATION WITH SUM OF SPARSE REGULARIZERS	658
<i>Ryo Hayakawa ; Kazunori Hayashi</i>	
RANK-ONE TENSOR APPROXIMATION WITH BETA-DIVERGENCE COST FUNCTIONS.....	663
<i>Michiel Vandecappelle ; Nico Vervliet ; Lieven De Lathauwer</i>	
SEMI-SUPERVISED ADAPTIVE LEARNING FOR DECODING MOVEMENT INTENT FROM ELECTROMYOGRAMS	668
<i>Henrique Dantas ; V John Mathews ; David Warren</i>	
LTE-BASED WIRELESS CHANNEL MODELING ON HIGH-SPEED RAILWAY AT 465MHZ.....	673
<i>Yanfei Niu ; Jianwen Ding ; Dan Fei ; Zhangdui Zhong ; Yanbing Liu</i>	
ACTIVE ACOUSTIC SOURCE TRACKING EXPLOITING PARTICLE FILTERING AND MONTE CARLO TREE SEARCH.....	678
<i>Thomas Haubner ; Alexander Schmidt ; Walter Kellermann</i>	
DEFECT DETECTION FROM COMPRESSED 3-D ULTRASONIC FREQUENCY MEASUREMENTS.....	683
<i>Sebastian Semper ; Jan Kirchhof ; Christoph Wagner ; Fabian Krieg ; Florian Roemer ; Giovanni Del Galdo</i>	
ELECTROMAGNETIC IMAGING OF A DIELECTRIC MICRO-STRUCTURE VIA CONVOLUTIONAL NEURAL NETWORKS	688
<i>Peipei Ran ; Yingying Qin ; Dominique Lesselier</i>	
MWF-BASED SPEECH DEREVERBERATION WITH A LOCAL MICROPHONE ARRAY AND AN EXTERNAL MICROPHONE	693
<i>Randall Ali ; Toon Van Waterschoot ; Marc Moonen</i>	
ITERATIVE WIENER FILTERING FOR DECONVOLUTION WITH RINGING ARTIFACT SUPPRESSION.....	698
<i>Filip Šroubek ; Tomáš Kerepecký ; Jan Kamenický</i>	
SATELLITE LINKS INTEGRATED IN 5G SDN-ENABLED BACKHAUL NETWORKS: AN ITERATIVE JOINT POWER AND FLOW ASSIGNMENT.....	703
<i>Eva Lagunas ; Lei Lei ; Symeon Chatzinotas ; Björn Ottersten</i>	
EXTRACTING PROPRIOCEPTIVE INFORMATION BY ANALYZING ROTATING RANGE SENSORS INDUCED DISTORTION	708
<i>Damien Vivet</i>	
MATRIX COFACTORIZATION FOR JOINT UNMIXING AND CLASSIFICATION OF HYPERSPECTRAL IMAGES.....	713
<i>Adrien Lagrange ; Mathieu Fauvel ; Stéphane May ; José M. Bioucas-Dias ; Nicolas Dobigeon</i>	
BEAM-STEERING IN SWITCHED 4D ARRAYS BASED ON THE DISCRETE WALSH TRANSFORM	718
<i>Roberto Maneiro-Catoira ; Marc Bernice Angoue Avelé ; Julio Brégains ; José A. García-Naya ; Luis Castedo</i>	
RECURSIVE LCMVES WITH NON-STATIONARY CONSTRAINTS AND PARTIALLY COHERENT SIGNAL SOURCES	723
<i>Eric Chaumette ; Jordi Vilà-Valls ; François Vincent ; Pau Closas</i>	
FMRI BOLD SIGNAL DECOMPOSITION USING A MULTIVARIATE LOW-RANK MODEL	728
<i>Hamza Cherkaoui ; Thomas Moreau ; Abderrahim Halimi ; Philippe Ciuciu</i>	
ON SPECTRAL EMBEDDINGS FOR SUPERVISED BINAURAL SOURCE LOCALIZATION.....	733
<i>Maja Taseska ; Toon Van Waterschoot</i>	
SPATIAL AND HIERARCHICAL RIEMANNIAN DIMENSIONALITY REDUCTION AND DICTIONARY LEARNING FOR SEGMENTING MULTICHANNEL IMAGES.....	738
<i>Faezeh Fallah ; Karim Armanious ; Bin Yang ; Fabian Bamberg</i>	
KERNEL BASED ONLINE CHANGE POINT DETECTION.....	743
<i>Ikram Bouchikhi ; André Ferrari ; Cédric Richard ; Anthony Bourrier ; Marc Bernot</i>	
MAXIMUM-LIKELIHOOD DOA ESTIMATION AT LOW SNR IN LAPLACE-LIKE NOISE.....	748
<i>Christoph F. Mecklenbräuker ; Peter Gerstoft</i>	
FULLY ADAPTIVE SAVITZKY-GOLAY TYPE SMOOTHERS	753
<i>Maciej Niedzwiecki ; Marcin Ciolek</i>	
CHANGE PREDICTION FOR LOW COMPLEXITY COMBINED BEAMFORMING AND ACOUSTIC ECHO CANCELLATION.....	758
<i>Matthias Schrammen ; Alexander Bohlender ; Stefan Kühl ; Peter Jax</i>	
TRAINING VARIATIONAL AUTOENCODERS WITH DISCRETE LATENT VARIABLES USING IMPORTANCE SAMPLING.....	763
<i>Alexander Bartler ; Felix Wiewel ; Lukas Mauch ; Bin Yang</i>	
HYPERSPECTRAL COMPLEX DOMAIN DENOISING	768
<i>Vladimir Katkovnik ; Igor Shevkunov ; Karen Egiazarian</i>	

SURROGATE REHABILITATIVE TIME SERIES DATA FOR IMAGE-BASED DEEP LEARNING.....	773
<i>Tracey K. M. Lee ; Eileen Y. L. Kuah ; Kee-Hao Leo ; Saeid Sanei ; Effie Chew ; Ling Zhao</i>	
LOW-RANK DATA MATRIX RECOVERY WITH MISSING VALUES AND FAULTY SENSORS	778
<i>Roberto López-Valcarce ; Josep Sala-Alvarez</i>	
FISTA: ACHIEVING A RATE OF CONVERGENCE PROPORTIONAL TO K^{-3} FOR SMALL/MEDIUM VALUES OF K.....	783
<i>Gustavo Silva ; Paul Rodriguez</i>	
AN EM ALGORITHM FOR JOINT DUAL-SPEAKER SEPARATION AND DEREVERBERATION	788
<i>Nili Cohen ; Gershon Hazan ; Boaz Schwartz ; Sharon Gannot</i>	
FREQUENCY DIVERSE ARRAY FOCUSING BEAMPATTERN SYNTHESIS WITH CONSTRAINED NONLINEAR PROGRAMMING FREQUENCY OFFSETS	793
<i>Yan-Shuo Cui ; Hui Chen ; Wen-Qin Wang</i>	
EFFICIENT FULL-RANK SPATIAL COVARIANCE ESTIMATION USING INDEPENDENT LOW-RANK MATRIX ANALYSIS FOR BLIND SOURCE SEPARATION	798
<i>Yuki Kubo ; Norihiro Takamune ; Daichi Kitamura ; Hiroshi Saruwatari</i>	
WAVELENGTH PROPORTIONAL ARRANGEMENT OF VIRTUAL MICROPHONES BASED ON INTERPOLATION/EXTRAPOLATION FOR UNDERDETERMINED SPEECH ENHANCEMENT	803
<i>Ryoga Jinzai ; Kouei Yamaoka ; Mitsuo Matsumoto ; Shoji Makino ; Takeshi Yamada</i>	
TWO-BAND SIGNAL RECONSTRUCTION FROM PERIODIC NON-UNIFORM SAMPLES	808
<i>Li Ping Guo ; Chi Wah Kok ; Hing Cheung So ; Wing Shan Tam</i>	
FULL COVARIANCE FITTING DOA ESTIMATION USING PARTIAL RELAXATION FRAMEWORK	813
<i>David Schenck ; Minh Trinh Hoang ; Xavier Mestre ; Mats Viberg ; Marius Pesavento</i>	
MAXIMUM LIKELIHOOD CONVOLUTIONAL BEAMFORMER FOR SIMULTANEOUS DENOISING AND DEREVERBERATION	818
<i>Tomohiro Nakatani ; Keisuke Kinoshita</i>	
DIFFUSION MAPS PARTICLE FILTER.....	823
<i>Lukas Forster ; Alexander Schmidt ; Walter Kellermann ; Tal Shnitzer ; Ronen Talmon</i>	
CNN-BASED MULTICHANNEL END-TO-END SPEECH RECOGNITION FOR EVERYDAY HOME ENVIRONMENTS.....	828
<i>Nelson Yalta ; Shinji Watanabe ; Takaaki Hori ; Kazuhiro Nakadai ; Tetsuya Ogata</i>	
A NEW ALGORITHM FOR DICTIONARY LEARNING BASED ON CONVEX APPROXIMATION	833
<i>Javad Parsa ; Mostafa Sadeghi ; Massoud Babaie-Zadeh ; Christian Jutten</i>	
DUAL-THRESHOLD BASED LOCAL PATCH CONSTRUCTION METHOD FOR MANIFOLD APPROXIMATION AND ITS APPLICATION TO FACIAL EXPRESSION ANALYSIS.....	838
<i>S L Happy ; Antitza Dantcheva ; Aurobinda Routray</i>	
EXACT MULTIPLICATIVE FACTOR UPDATES FOR CONVOLUTIONAL BETA-NMF IN 2D	843
<i>Pedro J. T. Villasana ; Stanislaw Gorlow</i>	
SEPARATION OF INDEPENDENT/DEPENDENT SOURCES USING COPULAS	848
<i>N. Mamouni ; H. Fenniri ; A. Ghazdali ; A. Hakim ; A. Keziou</i>	
tone mapped HDR images contrast enhancement using piecewise linear perceptual transformation.....	853
<i>Ba Chien Thai ; Anissa Mokraoui</i>	
ON ADAPTIVE SPECTRUM ESTIMATION OF MULTIVARIATE AUTOREGRESSIVE LOCALLY STATIONARY PROCESSES.....	858
<i>Michal Meller ; Maciej Niedzwiecki ; Damian Chojnacki</i>	
2D FOURIER TRANSFORM BASED ANALYSIS COMPARING THE DFA WITH THE DMA.....	863
<i>Bastien Berthelot ; Éric Grivel ; Pierrick Legrand ; Marc Donias ; Jean-Marc Andre ; Patrick Mazoyer ; Thierry Ferreira</i>	
SPATIAL INFERENCE IN SENSOR NETWORKS USING MULTIPLE HYPOTHESIS TESTING AND BAYESIAN CLUSTERING	868
<i>Martin Götz ; Michael Muma ; Topi Halme ; Abdelhak Zoubir ; Visa Koivunen</i>	
CONVEX COMBINATION OF SPLINE ADAPTIVE FILTERS	873
<i>Michele Scarpiniti ; Danilo Comminiello ; Aurelio Uncini</i>	
SPECTRAL COMPLEXITY REDUCTION OF MUSIC SIGNALS FOR COCHLEAR IMPLANT USERS BASED ON SUBSPACE TRACKING.....	878
<i>Johannes Gauer ; Ekaterina Krymova ; Denis Belomestny ; Rainer Martin</i>	

SHIP CLASSIFICATION FROM MULTI-SPECTRAL SATELLITE IMAGING BY CONVOLUTIONAL NEURAL NETWORKS	883
<i>Raffaele Grasso</i>	
NEURAL NETWORK AIDED COMPUTATION OF GENERALIZED SPATIAL MODULATION CAPACITY	888
<i>Anxo Tato ; Carlos Mosquera ; Pol Henarejos ; Ana Pérez-Neira</i>	
DEMODULATION ALGORITHM BASED ON HIGHER ORDER SYNCHROSQUEEZING	893
<i>Duong-Hung Pham ; Sylvain Meignen</i>	
COMPRESSION EFFICIENCY AND COMPUTATIONAL COST COMPARISON BETWEEN AV1 AND HEVC ENCODERS	898
<i>Isis Bender ; Daniel Palomino ; Luciano Agostini ; Guilherme Correa ; Marcelo Porto</i>	
PARTIALLY ADVERSARIAL LEARNING AND ADAPTATION	903
<i>Jen-Tzung Chien ; Yu-Ying Lyu</i>	
EDGE AND CLOUD-AIDED SECURE SPARSE REPRESENTATION FOR FACE RECOGNITION	908
<i>Yitu Wang ; Takayuki Nakachi ; Hiroyuki Ishihara</i>	
EFFICIENT ADAPTIVE MULTIPLE IMPORTANCE SAMPLING	913
<i>Yousef El-Laham ; Luca Martino ; Victor Elvira ; Mónica F. Bugallo</i>	
A NOVEL COMPRESSIVE SENSING SCHEME UNDER THE VARIATIONAL BAYESIAN FRAMEWORK	918
<i>Vangelis P. Oikonomou ; Spiros Nikolopoulos ; Ioannis Kompatsiaris</i>	
SUBSPACE-BASED METHOD FOR DIRECTION ESTIMATION OF COHERENT SIGNALS WITH ARBITRARY LINEAR ARRAY	923
<i>Xiao Chen ; Jingmin Xin ; Weiliang Zuo ; Jie Li ; Nanning Zheng ; Akira Sano</i>	
ROBUST AND RESPONSIVE ACOUSTIC PAIRING OF DEVICES USING DECORRELATING TIME-FREQUENCY MODELLING	928
<i>Pablo Pérez Zarazaga ; Tom Backström ; Stephan Sigg</i>	
DEEP LEARNING BASED LOCALIZATION OF NEAR-FIELD SOURCES WITH EXACT SPHERICAL WAVEFRONT MODEL	933
<i>Wenyi Liu ; Jingmin Xin ; Weiliang Zuo ; Jie Li ; Nanning Zheng ; Akira Sano</i>	
RADIO POSITIONING AND TRACKING OF HIGH-SPEED DEVICES IN 5G NR NETWORKS: SYSTEM CONCEPT AND PERFORMANCE	938
<i>Jukka Talvitie ; Mike Koivisto ; Toni Levanen ; Tero Ihalainen ; Kari Pajukoski ; Mikko Valkama</i>	
SEGMENTATION OF SURFACE CRACKS BASED ON A FULLY CONVOLUTIONAL NEURAL NETWORK AND GATED SCALE POOLING	943
<i>Jacob König ; Mark David Jenkins ; Peter Barrie ; Mike Mannion ; Gordon Morison</i>	
MEASURE-TRANSFORMED GAUSSIAN QUASI SCORE TEST IN THE PRESENCE OF NUISANCE PARAMETERS	948
<i>Koby Todros</i>	
A SINGLE ECG LEAD-BASED OSCILLATION INDEX FOR THE QUANTIFICATION OF PERIODIC BREATHING IN SEVERE HEART FAILURE PATIENTS	953
<i>Pauline Guyot ; El-Hadi Djermoune ; Thierry Bastogne ; Bruno Chenuel</i>	
2-D NON-SEPARABLE INTEGER IMPLEMENTATION OF PARAUNITARY FILTER BANK BASED ON THE QUATERNIONIC MULTIPLIER BLOCK-LIFTING STRUCTURE	958
<i>Eugene V. Rybenkov ; Nick A. Petrovsky</i>	
ESTIMATION OF SENSOR ARRAY SIGNAL MODEL PARAMETERS USING FACTOR ANALYSIS	963
<i>Andreas I. Koutrouvelis ; Richard C. Hendriks ; Richard Heusdens ; Jesper Jensen</i>	
NLOS CLASSIFICATION BASED ON RSS AND RANGING STATISTICS OBTAINED FROM LOW-COST UWB DEVICES	968
<i>Valentín Barral ; Carlos J. Escudero ; José A. García-Naya</i>	
COMPLEXITY SCALABLE HEVC-TO-AV1 TRANSCODING BASED ON CODING TREE DEPTH INHERITANCE	973
<i>Alex Borges ; Bruno Zatt ; Marcelo Porto ; Luciano Agostini ; Guilherme Correa</i>	
EVALUATION OF ANALOG ENCODING FOR MULTI-USER WIRELESS TRANSMISSION OF STILL IMAGES	978
<i>Jose Balsa ; Óscar Fresnedo ; Tomás Domínguez-Bolaño ; José A. García-Naya ; Luis Castedo</i>	
CALIBRATION OF ANTENNA ARRAY WITH DUAL CHANNEL SWITCHED RECEIVER SYSTEM	983
<i>Devanand Palur Palanivelu ; Marc Oispuu</i>	
DETECTING THE RANK OF A SYMMETRIC TENSOR	988
<i>Arthur Marmin ; Marc Castella ; Jean-Christophe Pesquet</i>	

AN ADAPTIVE SAMPLING TECHNIQUE FOR GRAPH DIFFUSION LMS ALGORITHM	993
<i>Daniel G. Tiglea ; Renato Candido ; Magno T. M. Silva</i>	
ON THE RECURSIONS OF ROBUST COMET ALGORITHM FOR CONVEXLY STRUCTURED SHAPE MATRIX	998
<i>B. Mériaux ; C. Ren ; A. Breloy ; M. N. El Korso ; P. Forste ; J.-P. Ovarlez</i>	
A CONTINUUM MODEL FOR ROUTE OPTIMIZATION IN LARGE-SCALE INHOMOGENEOUS MULTI-HOP WIRELESS NETWORKS	1003
<i>Dene A. Hedges ; Justin P. Coon ; Gaojie Chen</i>	
LIP-READING WITH LIMITED-DATA NETWORK	1008
<i>Adriana Fernandez-Lopez ; Federico M. Sukno</i>	
REPARAMETERIZATION GRADIENT MESSAGE PASSING	1013
<i>Semih Akbayrak ; Bert De Vries</i>	
ANALYTICAL METHOD TO CONVERT CIRCULAR HARMONIC EXPANSION COEFFICIENTS FOR SOUND FIELD SYNTHESIS BY USING MULTIPOLE LOUDSPEAKER ARRAY	1018
<i>Kitataka Tsutsumi ; Kenta Imaizumi ; Atsushi Nakadaira ; Yoichi Haneda</i>	
A ROBUST AND SEQUENTIAL APPROACH FOR DETECTING GAIT ASYMMETRY BASED ON RADAR MICRO-DOPPLER SIGNATURES	1023
<i>Ann-Kathrin Seifert ; Dominik Reinhard ; Abdelhak M. Zoubir ; Moeness G. Amin</i>	
SEMPARAMETRIC STOCHASTIC CRB FOR DOA ESTIMATION IN ELLIPTICAL DATA MODEL	1028
<i>Stefano Fortunati ; Fulvio Gini ; Maria S. Greco</i>	
ONLINE DICTIONARY LEARNING FOR SINGLE-SUBJECT FMRI DATA UNMIXING	1033
<i>Argheesh Bhanot ; Céline Meillier ; Fabrice Heitz ; Laura Harsan</i>	
GAZE TRACKING BY JOINT HEAD AND EYE POSE ESTIMATION UNDER FREE HEAD MOVEMENT	1038
<i>Stefania Cristina ; Kenneth P. Camilleri</i>	
PERCEPTION OF NON-NATIVE PHONEME CONTRASTS IN 8-13 MONTHS INFANTS: TENSOR-BASED ANALYSIS OF EEG SIGNALS	1043
<i>Mansoureh Aghabeig ; Bibiana Balaj ; Joanna Dreszer ; Monika Lewandowska ; Rafal Milner ; Natalia Pawlaczuk ; Tomasz Piotrowski ; Magdalena Szymtyke ; Wlodzislaw Duch</i>	
VISUAL QUALITY ANALYSIS OF JUDDER EFFECT ON HEAD MOUNTED DISPLAYS	1048
<i>Saeed Mahmoudpour ; Peter Schelkens</i>	
BAYESIAN SEQUENTIAL JOINT SIGNAL DETECTION AND SIGNAL-TO-NOISE RATIO ESTIMATION	1053
<i>Dominik Reinhard ; Michael Fauß ; Abdelhak M. Zoubir</i>	
AN ENSEMBLE LEARNING APPROACH FOR THE CLASSIFICATION OF REMOTE SENSING SCENES BASED ON COVARIANCE POOLING OF CNN FEATURES	1058
<i>Sara Akodad ; Solène Vilfroy ; Lionel Bombrun ; Charles C. Cavalcante ; Christian Germain ; Yannick Berthoumieu</i>	
TOPOLOGY INFERENCE AND SIGNAL REPRESENTATION USING DICTIONARY LEARNING	1063
<i>Mahmoud Ramezani-Mayiami ; Karl Skretting</i>	
LOSS FUNCTIONS FOR DENOISING COMPRESSED IMAGES: A COMPARATIVE STUDY	1068
<i>Thomas Oberlin ; François Malgouyres ; Jin-Yi Wu</i>	
A MACHINE LEARNING APPROACH TO THE IDENTIFICATION OF DYNAMICAL NONLINEAR SYSTEMS	1073
<i>Giorgio Biagetti ; Paolo Crippa ; Laura Falaschetti ; Claudio Turchetti</i>	
DERIVATION OF RESPIRATORY EFFORT FROM PHOTOPLETHYSMOGRAPHY	1078
<i>Delaram Jarchi ; Saeid Sanei</i>	
ADVANCING SPEECH RECOGNITION WITH NO SPEECH OR WITH NOISY SPEECH	1083
<i>Gautam Krishna ; Co Tran ; Mason Carnahan ; Ahmed Tewfik</i>	
EVALUATION OF MODIFICATIONS TO CPPPSNR IN 360° VIDEO QUALITY ASSESSMENT	1088
<i>Jayasingam Adhuran ; Gosala Kulupana ; Chathura Galkandage ; Anil Fernando</i>	
EXPACO: DETECTION OF AN EXTENDED PATTERN UNDER NONSTATIONARY CORRELATED NOISE BY PATCH COVARIANCE MODELING	1093
<i>Olivier Flasseur ; Loïc Denis ; Éric Thiébaud ; Thomas Olivier ; Corinne Fournier</i>	
PROVIDING SPATIAL CONTROL IN PERSONAL SOUND ZONES USING GRAPH SIGNAL PROCESSING	1098
<i>Vicent Molés-Cases ; Gema Pinero ; Alberto Gonzalez ; Maria De Diego</i>	

ON ROOM IMPULSE RESPONSE MEASUREMENT USING ORTHOGONAL PERIODIC SEQUENCES	1103
<i>Alberto Carini ; Simone Orcioni ; Stefania Cecchi</i>	
COMPLEXITY-REDUCED SUBOPTIMAL EQUALIZATION WITH MONTE CARLO BASED MIMO DETECTORS	1108
<i>Guilherme C. G. Fernandes ; Marcelo G. S. Bruno</i>	
JOINT SINGING VOICE SEPARATION AND F0 ESTIMATION WITH DEEP U-NET ARCHITECTURES	1113
<i>Andreas Jansson ; Rachel M. Bittner ; Sebastian Ewert ; Tillman Weyde</i>	
A NON-ITERATIVE RECONSTRUCTION ALGORITHM FOR SINGLE PIXEL SPECTRAL IMAGING WITH SIDE INFORMATION	1118
<i>Jorge Bacca ; Claudia V. Correa ; Henry Arguello</i>	
SELF-SUPERVISED ATTENTION MODEL FOR WEAKLY LABELED AUDIO EVENT CLASSIFICATION	1123
<i>Bongjun Kim ; Shabnam Ghaffarzadegan</i>	
MULTI-RESOLUTION RECONSTRUCTION ALGORITHM FOR PHASE RETRIEVAL IN X-RAY CRYSTALLOGRAPHY	1128
<i>Jhon Angarita ; Samuel Pinilla ; Hans Garcia ; Henry Arguello</i>	
NON-LOCAL RESTORATION OF SPARSE 3D SINGLE-PHOTON DATA	1133
<i>Songmao Chen ; Abderrahim Halimi ; Ximing Ren ; Aongus McCarthy ; Xiuqin Su ; Gerald S. Buller ; Steve McLaughlin</i>	
TV-CAR SPEECH ANALYSIS BASED ON REGULARIZED LP	1138
<i>Keiichi Funaki</i>	
AUTOMATIC CHORD ESTIMATION BASED ON A FRAME-WISE CONVOLUTIONAL RECURRENT NEURAL NETWORK WITH NON-ALIGNED ANNOTATIONS	1143
<i>Yiming Wu ; Tristan Carsault ; Kazuyoshi Yoshii</i>	
ITM-NET: DEEP INVERSE TONE MAPPING USING NOVEL LOSS FUNCTION BASED ON TONE MAPPING OPERATOR	1148
<i>Yuma Kinoshita ; Hitoshi Kiya</i>	
A DYADIC PARTICLE FILTER FOR PRICE PREDICTION	1153
<i>Myrsini Ntemi ; Constantine Kotropoulos</i>	
PATH-CONNECTEDNESS OF TENSOR RANKS	1158
<i>Yang Qi ; Pierre Comon ; Lek-Heng Lim ; Ke Ye</i>	
MEASUREMENT-BASED WIDEBAND RADIO CHANNEL CHARACTERIZATION IN AN UNDERGROUND PARKING LOT	1163
<i>Yang Miao ; Wei Wang ; José Rodríguez-Piñeiro ; Tomás Domínguez-Bolaño ; Yi Gong</i>	
STRESS DETECTION THROUGH ELECTRODERMAL ACTIVITY (EDA) AND ELECTROCARDIOGRAM (ECG) ANALYSIS IN CAR DRIVERS	1168
<i>Pamela Zontone ; Antonio Affanni ; Riccardo Bernardini ; Alessandro Piras ; Roberto Rinaldo</i>	
CONNECTIONS BETWEEN REASSIGNED SPECTRUM AND LEAST SQUARES ESTIMATION FOR SINUSOIDAL MODELS	1173
<i>Yannis Pantazis ; Vassilis Tsiaras ; Yannis Stylianou</i>	
CNN-BASED VIRTUAL MICROPHONE SIGNAL ESTIMATION FOR MPDR BEAMFORMING IN UNDERDETERMINED SITUATIONS	1178
<i>Kouei Yamaoka ; Li Li ; Nobutaka Ono ; Shoji Makino ; Takeshi Yamada</i>	
SIGNAL SUBSPACE CHANGE DETECTION IN STRUCTURED COVARIANCE MATRICES	1183
<i>R. Ben Abdallah ; A. Breloy ; A. Taylor ; M. N. El Korso ; D. Lautru</i>	
A PROBABILISTIC METHOD TO FIND AND VISUALIZE DISTINCT REGIONS IN PROTEIN SEQUENCES	1188
<i>Morteza Hosseini ; Diogo Pratas ; Armando J. Pinho</i>	
UNSUPERVISED MEDICAL IMAGE TRANSLATION USING CYCLE-MEDGAN	1193
<i>Karim Armanious ; Chenming Jiang ; Sherif Abdulatif ; Thomas Küstner ; Sergios Gatidis ; Bin Yang</i>	
LOSOFT: L₀ MINIMIZATION VIA SOFT THRESHOLDING	1198
<i>Mostafa Sadeghi ; Fateme Ghayem ; Massoud Babaie-Zadeh ; Saikat Chatterjee ; Mikael Skoglund ; Christian Jutten</i>	
AN ADVERSARIAL SUPER-RESOLUTION REMEDY FOR RADAR DESIGN TRADE-OFFS	1203
<i>Karim Armanious ; Sherif Abdulatif ; Fady Aziz ; Urs Schneider ; Bin Yang</i>	
COMPRESSION OF HIGH-DIMENSIONAL MULTISPECTRAL IMAGE TIME SERIES USING TENSOR DECOMPOSITION LEARNING	1208
<i>Anastasia Aidini ; Grigorios Tsagkatakis ; Panagiotis Tsakalides</i>	
SPECTRUM INSENSITIVE SPARSE RECOVERY WITH ITERATIVE AFFINE PROJECTIONS	1213
<i>Nicolae Cleju ; Iulian B. Ciocoiu</i>	

EXPERIMENTAL EVALUATION OF THE RECONFIGURABLE PHOTODETECTOR FOR BLIND INTERFERENCE ALIGNMENT IN VISIBLE LIGHT COMMUNICATIONS	1218
<i>Máximo Morales-Céspedes ; Ahmad Adnan Quidan ; Ana García Armada</i>	
A NEW SIGNAL-SELECTIVE WIDE-BAND AMBIGUITY FUNCTION	1223
<i>Antonio Napolitano</i>	
SEQUENTIAL PEAK DETECTION FOR FLOW CYTOMETRY	1228
<i>Gökhan Gül ; Sabine Alebrand ; Michael Baßler ; Jörn Wittek</i>	
THE ART OF TEACHING COMPUTERS: THE SIMSSA OPTICAL MUSIC RECOGNITION WORKFLOW SYSTEM.....	1233
<i>Ichiro Fujinaga ; Gabriel Vigliensoni</i>	
CODED APERTURE DESIGN FOR SUPER-RESOLUTION PHASE RETRIEVAL	1238
<i>Jorge Bacca ; Samuel Pinilla ; Henry Arguello</i>	
VARIATIONAL BAYESIAN GAN	1243
<i>Jen-Tzung Chien ; Chun-Lin Kuo</i>	
MULTISCALE PERMUTATION ENTROPY: STATISTICAL CHARACTERIZATION ON AUTOREGRESSIVE AND MOVING AVERAGE PROCESSES.....	1248
<i>Antonio Dávalos ; Meryem Jabloun ; Philippe Ravier ; Olivier Buttelli</i>	
PATCH-BASED COLOUR TRANSFER WITH OPTIMAL TRANSPORT.....	1253
<i>Hana Alghamdi ; Mairead Grogan ; Rozenn Dahyot</i>	
FEATURE LMS ALGORITHM FOR BANDPASS SYSTEM MODELS.....	1258
<i>Paulo S. R. Diniz ; Hamed Yazdanpanah ; Markus V. S. Lima</i>	
SINGLE IMAGE HAZE REMOVAL USING CONDITIONAL WASSERSTEIN GENERATIVE ADVERSARIAL NETWORKS.....	1263
<i>Joshua Peter Ebenezer ; Bijaylaxmi Das ; Sudipta Mukhopadhyay</i>	
ONLINE MULTISCALE-DATA CLASSIFICATION BASED ON MULTIKERNEL ADAPTIVE FILTERING WITH APPLICATION TO SENTIMENT ANALYSIS.....	1268
<i>Ran Iwamoto ; Masahiro Yukawa</i>	
STATE SPACE MODELS WITH DYNAMICAL AND SPARSE VARIANCES, AND INFERENCE BY EM MESSAGE PASSING.....	1273
<i>Federico Wadehn ; Thilo Weber ; Hans-Andrea Loeliger</i>	
DEEP LL-PCA OF TIME-VARIANT DATA WITH APPLICATION TO BRAIN CONNECTIVITY MEASUREMENTS.....	1278
<i>Giovanna Orrú ; Tiziana Cattai ; Stefania Colonnese ; Gaetano Scarano ; Fabrizio De Vico Fallani ; Panos Markopoulos ; Dimitris Pados</i>	
A ROBUST ROLL ANGLE ESTIMATION ALGORITHM BASED ON GRADIENT DESCENT.....	1283
<i>Rui Fan ; Lujia Wang ; Ming Liu ; Ioannis Pitas</i>	
FRACTIONAL PROGRAMMING FOR ENERGY EFFICIENT POWER CONTROL IN UPLINK MASSIVE MIMO SYSTEMS	1288
<i>Amare Kassaw ; Dereje Hailemariam ; Michael Fauß ; A. M. Zoubir</i>	
FAST MULTICHANNEL SOURCE SEPARATION BASED ON JOINTLY DIAGONALIZABLE SPATIAL COVARIANCE MATRICES	1293
<i>Kouhei Sekiguchi ; Aditya Arie Nugraha ; Yoshiaki Bando ; Kazuyoshi Yoshii</i>	
FDA-MIMO SIGNAL PROCESSING FOR MAINLOBE JAMMER SUPPRESSION	1298
<i>Wen-Qin Wang ; Hing Cheung So ; Alfonso Farina</i>	
BAYESIAN ESTIMATION OF RECURRENT CHANGEPOINTS FOR SIGNAL SEGMENTATION AND ANOMALY DETECTION.....	1303
<i>Christian Reich ; Christina Nicolaou ; Ahmad Mansour ; Kristof Van Laerhoven</i>	
A LEAST SQUARES NARROWBAND DOA ESTIMATOR WITH ROBUSTNESS AGAINST PHASE WRAPPING	1308
<i>Tobias Kabzinski ; Emanuel A. P. Habets</i>	
BLIND CALIBRATION OF SENSOR ARRAYS FOR NARROWBAND SIGNALS WITH ASYMPTOTICALLY OPTIMAL WEIGHTING	1313
<i>Amir Weiss ; Arie Yeredor</i>	
REPLAY ATTACK DETECTION USING GENERALIZED CROSS-CORRELATION OF STEREO SIGNAL.....	1318
<i>Ryoya Yaguchi ; Sayaka Shiota ; Nobutaka Ono ; Hitoshi Kiya</i>	
BREATHING RATE COMPLEXITY FEATURES FOR “IN-THE-WILD” STRESS AND ANXIETY MEASUREMENT	1323
<i>Abhishek Tiwari ; Shrikanth Narayanan ; Tiago H. Falk</i>	
MAXIMUM-LIKELIHOOD DETECTION OF IMPULSIVE NOISE SUPPORT FOR CHANNEL PARAMETER ESTIMATION.....	1328
<i>Xavier Mestre ; Miquel Payaró ; Deep Shrestha</i>	

BAYESIAN ROBUST SIGNAL SUBSPACE ESTIMATION IN NON-GAUSSIAN ENVIRONMENT	1333
<i>R. Ben Abdallah ; A. Breloy ; M. N. El Korso ; D. Lautru</i>	
CONVOLUTIONAL LSTM-BASED LONG-TERM SPECTRUM PREDICTION FOR DYNAMIC SPECTRUM ACCESS	1338
<i>Bethelhem S. Shawel ; Dereje H. Woldegebreal ; Sofie Pollin</i>	
ON THE SEGMENTATION OF PLANTAR FOOT THERMAL IMAGES WITH DEEP LEARNING	1343
<i>Asma Bougrine ; Rachid Harba ; Raphael Canals ; Roger Ledee ; Meryem Jabloun</i>	
EFFICIENCY OF THE MEMORY POLYNOMIAL MODEL IN REALIZING DIGITAL TWINS FOR GAIT ASSESSMENT	1348
<i>Javier Conte Alcaraz ; Sanam Moghaddamnia ; Martin Fuhrwerk ; Jürgen Peissig</i>	
MULTI-SCALE AGGREGATION OF PHASE INFORMATION FOR COMPLEXITY REDUCTION OF CNN BASED DOA ESTIMATION	1353
<i>Soumitro Chakrabarty ; Emanuël A. P. Habets</i>	
REGION-BASED RELAXATIONS TO ACCELERATE GREEDY APPROACHES	1358
<i>Clément Dorffer ; Cédric Herzet ; Angélique Drémeau</i>	
RANDOM MATRIX-IMPROVED ESTIMATION OF THE WASSERSTEIN DISTANCE BETWEEN TWO CENTERED GAUSSIAN DISTRIBUTIONS	1363
<i>Malik Tiomoko ; Romain Couillet</i>	
COVERAGE ANALYSIS FOR BACKSCATTER COMMUNICATION EMPOWERED CELLULAR INTERNET-OF-THINGS : INVITED PAPER	1368
<i>Syed Ali Raza Zaidi ; Maryam Hafeez ; Des McLernon ; Moe Z. Win</i>	
A GRAPH SIGNAL PROCESSING FRAMEWORK FOR ATRIAL ACTIVITY EXTRACTION	1373
<i>Miao Sun ; Elvin Isufi ; Natasja M. S. De Groot ; Richard C. Hendriks</i>	
STRUCTURE LEARNING VIA HADAMARD PRODUCT OF CORRELATION AND PARTIAL CORRELATION MATRICES	1378
<i>Karina Ashurbekova ; Sophie Achard ; Florence Forbes</i>	
JOINT LOW-RANK FACTORIZATIONS WITH SHARED AND UNSHARED COMPONENTS: IDENTIFIABILITY AND ALGORITHMS	1383
<i>Mikael Sorensen ; Nikolaos D. Sidiropoulos</i>	
TRACKING RECURRING PATTERNS IN TIME SERIES USING DYNAMIC TIME WARPING	1388
<i>Rik Van Der Vlist ; Cees Taal ; Richard Heusdens</i>	
IMPROVING ENERGY DISAGGREGATION PERFORMANCE USING APPLIANCE-DRIVEN SAMPLING RATES	1393
<i>Pascal A. Schirmer ; Iosif Mporas</i>	
LABELER-HOT DETECTION OF EEG EPILEPTIC TRANSIENTS	1398
<i>Lukasz Czekał ; Wojciech Ziembła ; Pawel Jezierski ; Pawel Swiniarski ; Anna Kolodziejak ; Pawel Ogniewski ; Pawel Niedbalski ; Anna Jezierska ; Daniel Wesierski</i>	
ATOMIC NORMS IN GROUP SLIDING SPARSE RECOVERY	1403
<i>Carlos Buelga Sanchez ; David Gregoratti ; Xavier Mestre</i>	
CURRICULUM-BASED TEACHER ENSEMBLE FOR ROBUST NEURAL NETWORK DISTILLATION	1408
<i>Georgios Panagiotatos ; Nikolaos Passalis ; Alexandros Iosifidis ; Moncef Gabbouj ; Anastasios Tefas</i>	
COMPENSATING FOR OBJECT VARIABILITY IN DNN-HMM OBJECT-CENTERED HUMAN ACTIVITY RECOGNITION	1413
<i>Yikai Peng ; Peter Jancovic ; Martin Russell</i>	
AUDIO-BASED EPILEPTIC SEIZURE DETECTION	1418
<i>M. N. Istiaq Ahsan ; Csaba Kertesz ; Annamaria Mesáros ; Toni Heittola ; Andrew Knight ; Tuomas Virtanen</i>	
WEIGHTED SUBSET SELECTION FOR FAST SVM TRAINING	1423
<i>Sara Mourad ; Ahmed Tewfik ; Haris Vikalo</i>	
DEEP LOG-LIKELIHOOD RATIO QUANTIZATION	1428
<i>Marius Arvinte ; Ahmed H. Tewfik ; Sriram Vishwanath</i>	
IMPROVING THE PERFORMANCE OF LIGHTWEIGHT CNN MODELS USING MINIMUM ENCLOSING BALL REGULARIZATION	1433
<i>Maria Tzelepi ; Anastasios Tefas</i>	
FAST CU SIZE DECISIONS FOR HEVC INTER-PREDICTION USING SUPPORT VECTOR MACHINES	1438
<i>Buddhiprabha Erabadda ; Thanuja Mallikarachchi ; Gosala Kulupana ; Anil Fernando</i>	
SUPER-RESOLUTION ON DEGRADED LOW-RESOLUTION IMAGES USING CONVOLUTIONAL NEURAL NETWORKS	1443
<i>Fatma Albluwi ; Vladimir A. Krylov ; Rozenn Dahyot</i>	

CONTEXT-AWARE NEURAL VOICE ACTIVITY DETECTION USING AUXILIARY NETWORKS FOR PHONEME RECOGNITION, SPEECH ENHANCEMENT AND ACOUSTIC SCENE CLASSIFICATION	1448
<i>Ryo Masumura ; Kiyooki Matsui ; Yuma Koizumi ; Takaaki Fukutomi ; Takanobu Oba ; Yushi Aono</i>	
GENERALIZED MULTICHANNEL VARIATIONAL AUTOENCODER FOR UNDERDETERMINED SOURCE SEPARATION	1453
<i>Shogo Seki ; Hirokazu Kameoka ; Li Li ; Tomoki Toda ; Kazuya Takeda</i>	
AD-HOC MOBILE ARRAY BASED AUDIO SEGMENTATION USING LATENT VARIABLE STOCHASTIC MODEL	1458
<i>Srikanth Raj Chetupalli ; Anirban Bhowmick ; Thippur V. Sreenivas</i>	
FAST DIRECT DETECTION OF ACCELERATING RADAR TARGETS	1463
<i>Songsri Sirianunpiboon ; Stephen D. Howard ; Stephen D. Elton</i>	
ALCOHOLIC EEG ANALYSIS USING RIEMANN GEOMETRY BASED FRAMEWORK	1468
<i>K. Gopika Gopan ; Neelam Sinha ; Dinesh Babu Jayagopi</i>	
A UNIFYING FRAMEWORK FOR BLIND SOURCE SEPARATION BASED ON A JOINT DIAGONALIZABILITY CONSTRAINT	1473
<i>Rintaro Ikeshita ; Nobutaka Ito ; Tomohiro Nakatani ; Hiroshi Sawada</i>	
NAVIDAD: A NO-REFERENCE AUDIO-VISUAL QUALITY METRIC BASED ON A DEEP AUTOENCODER	1478
<i>Helard Martinez ; Mylène C. Q. Farias ; Andrew Hines</i>	
PARAMETER ESTIMATION OF HEAVY-TAILED AR(P) MODEL FROM INCOMPLETE DATA	1483
<i>Junyan Liu ; Sandeep Kumar ; Daniel P. Palomar</i>	
TRAINING GENERATIVE ADVERSARIAL NETWORKS WITH WEIGHTS	1488
<i>Yannis Pantazis ; Dipjyoti Paul ; Michail Fasoulakis ; Yannis Stylianou</i>	
SPECTRAL-SPATIAL CLASSIFICATION OF HYPERSPECTRAL IMAGES USING CNNs AND APPROXIMATE SPARSE MULTINOMIAL LOGISTIC REGRESSION	1493
<i>Sezer Kutluk ; Koray Kayabol ; Aydın Akan</i>	
MULTIPLE K-MEANS CLUSTERING BASED LOCALLY LOW-RANK APPROACH TO NONLINEAR MATRIX COMPLETION	1498
<i>Katsumi Konishi ; Tomoki Shise ; Ryohei Sasaki ; Toshihiro Furukawa</i>	
A TEMPORAL DEPENDENCY MODEL FOR RATE-DISTORTION OPTIMIZATION IN VIDEO CODING	1503
<i>Jingning Han ; Paul Wilkins ; Yaowu Xu ; James Bankoski</i>	
A LOW COMPLEXITY IMAGE COMPRESSION ALGORITHM FOR IOT MULTIMEDIA APPLICATIONS	1507
<i>Giuseppe Campobello ; Antonino Segreto</i>	
A LOW-COMPUTATION-CYCLE DESIGN OF INPUT-DECIMATION TECHNIQUE FOR RIDFT ALGORITHM	1512
<i>Chih-Feng Wu ; Chun-Hung Chen ; Muh-Tian Shiue</i>	
VARIATIONAL BAYES COLOR DECONVOLUTION WITH A TOTAL VARIATION PRIOR	1517
<i>Miguel Vega ; Javier Mateos ; Rafael Molina ; Aggelos K. Katsaggelos</i>	
IDENTIFYING STABLE COMPONENTS OF MATRIX /TENSOR FACTORIZATIONS VIA LOW-RANK APPROXIMATION OF INTER-FACTORIZATION SIMILARITY	1522
<i>Simon Van Eyndhoven ; Nico Vervliet ; Lieven De Lathauwer ; Sabine Van Huffel</i>	
A MODELLING APPROACH TO GENERATE REPRESENTATIVE UAV TRAJECTORIES USING PSO	1527
<i>Babak Salamat ; Andrea M. Tonello</i>	
PREDICTION OF FDG UPTAKE IN LUNG TUMORS FROM CT IMAGES USING GENERATIVE ADVERSARIAL NETWORKS	1532
<i>Annika Liebgott ; Darius Hindere ; Karim Armanious ; Alexander Bartler ; Konstantin Nikolaou ; Sergios Gatidis ; Bin Yangl</i>	
GRAPHICAL SCHEMES DESIGNED TO DISPLAY AND STUDY THE LONG-TERM VARIATIONS OF SCHUMANN RESONANCE	1537
<i>Jesús Rodríguez-Camacho ; Juan Francisco Gómez Lopera ; Alfonso Salinas ; Jesús Fornieles-Callejón ; Jorge Portí ; David Blanco-Navarro ; Ma Carmen Carrión ; Enrique Navarro Camba</i>	
HARDWARE ACCELERATION OF APPROXIMATE TRANSFORM MODULE FOR THE VERSATILE VIDEO CODING STANDARD	1542
<i>Ahmed Kammoun ; Wassim Hamidouche ; Pierrick Philipp ; Fatma Belghith ; Nouri Massmoudi ; Jean-François Nezan</i>	
MULTI-MICROPHONE SPEAKER SEPARATION BASED ON DEEP DOA ESTIMATION	1547
<i>Shlomo E. Chazan ; Hodaya Hammer ; Gershon Hazan ; Jacob Goldberger ; Sharon Gannot</i>	

SWITCH-BASED HYBRID PRECODING IN MMWAVE MASSIVE MIMO SYSTEMS	1552
<i>Hamed Nosrati ; Elias Aboutanios ; David Smith ; Xiangrong Wang</i>	
ESTIMATION OF A LOW-RANK PROBABILITY-TENSOR FROM SAMPLE SUB-TENSORS VIA JOINT FACTORIZATION MINIMIZING THE KULLBACK-LEIBLER DIVERGENCE	1557
<i>Arie Yeredor ; Martin Haardt</i>	
A SPEECH RECONSTRUCTION ALGORITHM VIA ITERATIVELY REWEIGHTED L_2 MINIMIZATION FOR MFCC CODEC	1562
<i>Gang Min ; Xiongwei Zhang ; Xiangyang Liu ; Changqing Zhang ; Yanpu Chen</i>	
RATE BALANCING FOR MULTIUSER MULTICELL DOWNLINK MIMO SYSTEMS	1567
<i>Imène Ghamnia ; Dirk Slock ; Yi Yuan-Wu</i>	
FILTERING-BASED ANALYSIS COMPARING THE DFA WITH THE CDFA FOR WIDE SENSE STATIONARY PROCESSES	1572
<i>Bastien Berthelot ; Éric Grivel ; Pierrick Legrand ; Jean-Marc André ; Patrick Mazoyer ; Thierry Ferreira</i>	
EFFECTIVENESS OF CROSS-DOMAIN ARCHITECTURES FOR WHISPER-TO-NORMAL SPEECH CONVERSION	1577
<i>Mihir Parmar ; Savan Doshi ; Nirmesh J. Shah ; Maitreya Patel ; Hemant A. Patil</i>	
AUTOMATIC MEASUREMENT OF SPEECH BREATHING RATE	1582
<i>K. Mohamed Ismail Yasar Arafath ; Aurobinda Routray</i>	
A DATA AUGMENTATION APPROACH FOR SAMPLING GAUSSIAN MODELS IN HIGH DIMENSION	1587
<i>Y. Marnissi ; D. Abboud ; E. Chouzenoux ; J-C. Pesquet ; M. El-Badaoui ; A. Benazza-Benyahia</i>	
DEFINING GRAPH SIGNAL DISTANCES USING AN OPTIMAL MASS TRANSPORT FRAMEWORK	1592
<i>Maria Juhlin ; Filip Elvander ; Andreas Jakobsson</i>	
REAL-TIME PROTOTYPING OF MATLAB-JAVA CODE INTEGRATION FOR WATER SENSOR NETWORKS APPLICATIONS	1597
<i>S. Roubakis ; G. Tzagkarakis ; P. Tsakalides</i>	
OPTIMIZATION-BASED SYNTHESIS OF TIME-MODULATED ARRAYS WITH ACCURATE TIME-FREQUENCY ANALYSIS	1602
<i>Lorenzo Poli ; Marco Salucci ; Diego Masotti ; Paolo Rocca</i>	
COMPRESSIVE DIGITAL RECEIVER: FIRST RESULTS ON SENSITIVITY, DYNAMIC RANGE AND INSTANTANEOUS BANDWIDTH MEASUREMENTS	1606
<i>Ali Bugra Korucu ; Yasar Kemal Alp ; Gokhan Gok ; Orhan Arikan</i>	
COLLECTING, ANALYZING AND PREDICTING SOCIALLY-DRIVEN IMAGE INTERESTINGNESS	1611
<i>Eloïse Berson ; Ngoc Q. K. Duong ; Claire-Hélène Demarty</i>	
DETECTING EARLY PARKINSON'S DISEASE FROM KEYSTROKE DYNAMICS USING THE TENSOR-TRAIN DECOMPOSITION	1616
<i>Oroojeni M. J. Hooman ; James Oldfield ; Mihalis A. Nicolaou</i>	
ANALYSIS OF PARKINSON'S DISEASE DYSGRAPHIA BASED ON OPTIMIZED FRACTIONAL ORDER DERIVATIVE FEATURES	1621
<i>Jan Mucha ; Marcos Faundez-Zanuy ; Jiri Mekyska ; Vojtech Zvoncak ; Zoltan Galaz ; Tomas Kiska ; Zdenek Smekal ; Lubos Brabenec ; Irena Rektorova ; Karmele Lopez-De-Ipina</i>	
IMAGE AND ONTOLOGICAL INFORMATION FUSION FOR CATARACT SURGERY RECOMMENDATION	1626
<i>José Nuno Galveia ; Luís A. Da Silva Cruz ; António Travassos</i>	
INVESTIGATING TIME-VARYING BRAIN CONNECTIVITY WITH FUNCTIONAL MAGNETIC RESONANCE IMAGING USING SEQUENTIAL MONTE CARLO	1631
<i>Pierfrancesco Ambrosi ; Mauro Costagli ; Ercan E Kuruoglu ; Laura Biagi ; Guido Buonincontri ; Michela Tosetti</i>	
GENERALIZED GAMMA DISTRIBUTION SAR SEA CLUTTER MODELLING FOR OIL SPILL CANDIDATES DETECTION	1636
<i>Mari-Cortes Benito-Ortiz ; David Mata-Moya ; Maria-Pilar Jarabo-Amores ; Nerea Del Rey-Maestre ; Pedro-Jose Gomez-Del-Hoyo</i>	
COMPARING OPTIMIZATION METHODS OF NEURAL NETWORKS FOR REAL-TIME INFERENCE	1641
<i>Mir Khan ; Henri Lunnikivi ; Heikki Huttunen ; Jani Boutellier</i>	
INTRODUCING SPAIN (SPARSE AUDIO INPAINTER)	1646
<i>Ondrej Mokřý ; Pavel Závíška ; Pavel Rajmic ; Vítězslav Veselý</i>	
A SPARSE AND PRIOR BASED METHOD FOR 3D IMAGE DENOISING	1651
<i>J. F. P. J. Abascal ; S. Si-Mohamed ; P. Douek ; C. Chappard ; F. Peyrin</i>	

FRONT-END FEATURE COMPENSATION FOR NOISE ROBUST SPEECH EMOTION RECOGNITION	1656
<i>Meghna Pandharipande ; Rupayan Chakraborty ; Ashish Panda ; Biswajit Das ; Sumil Kumar Kopparapu</i>	
PREDICTING THE SUCCESS OF BLASTOCYST IMPLANTATION FROM MORPHOKINETIC PARAMETERS ESTIMATED THROUGH CNNs AND SUM OF ABSOLUTE DIFFERENCES	1661
<i>Julio Silva-Rodríguez ; Adrián Colomer ; Marcos Meseguer ; Valery Naranjo</i>	
MULTIPLE-DEGRADATION VIDEO SUPER-RESOLUTION WITH DIRECT INVERSION OF THE LOW-RESOLUTION FORMATION MODEL	1666
<i>Santiago Lopez-Tapia ; Alice Lucas ; Rafael Molina ; Aggelos K. Katsaggelos</i>	
TIME MODULATED ARRAY – A DATABASE APPROACH	1671
<i>Jérôme Euzière ; Régis Guinvarc'H ; Israel Hinojosa Sáenz ; Raphaël Gillard ; Bernard Uguen</i>	
GRAPH SPECTRAL DOMAIN FEATURES FOR STATIC HAND GESTURE RECOGNITION	1675
<i>Basheer Alwaely ; Charith Abhayaratne</i>	
MONAURAL SOURCE SEPARATION BASED ON SEQUENTIALLY TRAINED LSTMS IN REAL ROOM ENVIRONMENTS	1680
<i>Yi Li ; Yang Sun ; Syed Mohsen Naqvi</i>	
ON REALIZING DISTRIBUTED DEEP NEURAL NETWORKS: AN ASTROPHYSICS CASE STUDY	1685
<i>Maria Aspri ; Grigorios Tsagkatakis ; Athanasia Panousopoulou ; Panagiotis Tsakalides</i>	
HYPERSPETRAL X-RAY DENOISING: MODEL-BASED AND DATA-DRIVEN SOLUTIONS	1690
<i>Nicolò Bonettini ; Marco Paracchini ; Paolo Bestagini ; Marco Marcon ; Stefano Tubaro</i>	
L₀-NORM ADAPTIVE VOLTERRA FILTERS	1695
<i>Hamed Yazdanpanah ; Alberto Carini ; Markus V. S. Lima</i>	
LEARNING TENSOR-STRUCTURED DICTIONARIES WITH APPLICATION TO HYPERSPETRAL IMAGE DENOISING	1700
<i>Cássio F. Dantas ; Jérémy E. Cohen ; Rémi Gribonval</i>	
REGRESSION TO A LINEAR LOWER BOUND WITH OUTLIERS: AN EXPONENTIALLY MODIFIED GAUSSIAN NOISE MODEL	1705
<i>Julien Gori ; Olivier Rioul</i>	
ROBUST COMPRESSIVE SPECTRAL IMAGE RECOVERY ALGORITHM USING DICTIONARY LEARNING AND TRANSFORM TENSOR SVD	1710
<i>Yesid Fonseca ; Tatiana Gelvez ; Henry Arguello Fuentes</i>	
TARGET IDENTIFICATION FROM CODED DIFFRACTION PATTERNS VIA TEMPLATE MATCHING	1715
<i>Andrés Jerez ; Samuel Pinilla ; Hans Garcia ; Henry Arguello</i>	
INVESTIGATION OF REVERSE MODE LOUDSPEAKER PERFORMANCE IN URBAN SOUND CLASSIFICATION	1720
<i>Gyorgy Kalmar</i>	
FORWARD LOOKING GPR-BASED LANDMINE DETECTION USING A ROBUST LIKELIHOOD RATIO TEST	1725
<i>Afief D. Pambudi ; Michael Fauß ; Fauzia Ahmad ; Abdelhak M. Zoubir</i>	
CARDIAC MOTION ESTIMATION USING CONVOLUTIONAL SPARSE CODING	1730
<i>Nelson Diaz ; Adrian Basarab ; Jean-Yves Tourneret ; Henry Arguello Fuentes</i>	
DEMPSTER-SHAFER THEORY FOR FUSING FACE MORPHING DETECTORS	1735
<i>Andrey Makrushin ; Christian Kraetzer ; Jana Dittmann ; Clemens Seibold ; Anna Hilsmann ; Peter Eisert</i>	
DEEP NEURAL NETWORK BASED POETIC METER CLASSIFICATION USING MUSICAL TEXTURE FEATURE FUSION	1740
<i>Rajeev Rajan ; Anu Alphonsa Raju</i>	
MULTI-EXPONENTIAL RELAXATION TIMES MAPS RECONSTRUCTION AND UNSUPERVISED CLASSIFICATION IN MAGNITUDE MAGNETIC RESONANCE IMAGING	1745
<i>Christian El Hajj ; Saïd Moussaoui ; Guylaine Collewet ; Maja Musse</i>	
HYBRID FSO/RF-FSO SYSTEMS OVER GENERALIZED MÁLAGA DISTRIBUTED CHANNELS WITH POINTING ERRORS	1750
<i>Banibrata Bag ; Akinchan Das ; Chayanika Bose ; Aniruddha Chandra</i>	
A COMPLETE FRAMEWORK OF RADAR PULSE DETECTION AND MODULATION CLASSIFICATION FOR COGNITIVE EW	1755
<i>Ersin Yar ; Mehmet Burak Kocamis ; Adnan Orduyilmaz ; Mahmut Serin ; Murat Efe</i>	
COVERAGE ANALYSIS OF RELAY ASSISTED V2I COMMUNICATION IN MICROCELLULAR URBAN NETWORKS	1760
<i>Blanca Ramos Elbal ; Martin Klaus Müller ; Stefan Schwarz ; Markus Rupp</i>	

DISTRIBUTED ADAPTIVE NODE-SPECIFIC SIGNAL ESTIMATION IN A WIRELESS SENSOR NETWORK WITH PARTIAL PRIOR KNOWLEDGE OF THE DESIRED SOURCE STEERING VECTOR	1765
<i>Robbe Van Rompaey ; Marc Moonen</i>	
GENERALIZING GRAPH CONVOLUTIONAL NEURAL NETWORKS WITH EDGE-VARIANT RECURSIONS ON GRAPHS	1770
<i>Elvin Isufi ; Fernando Gama ; Alejandro Ribeiro</i>	
AN NMF-BASED APPROACH FOR HYPERSPECTRAL UNMIXING USING A NEW MULTIPLICATIVE-TUNING LINEAR MIXING MODEL TO ADDRESS SPECTRAL VARIABILITY	1775
<i>Fatima Zohra Benhalouche ; Moussa Sofiane Karoui ; Yannick Deville</i>	
HYPERSPECTRAL AND MULTISPECTRAL IMAGE FUSION BASED ON A NON-LOCALLY CENTRALIZED SPARSE MODEL AND ADAPTIVE SPATIAL-SPECTRAL DICTIONARIES	1780
<i>Kevin Arias ; Edwin Vargas ; Henry Arguello</i>	
UNDERWATER ACOUSTIC CHANNEL ESTIMATION AND EQUALIZATION VIA ADAPTIVE FILTERING AND SPARSE APPROXIMATION	1785
<i>Stephane Crombez ; Mariane R. Petraglia ; Antonio Petraglia</i>	
AN UNMIXING-BASED CHANGE DETECTION APPROACH FOR MULTIREOLUTION REMOTE SENSING IMAGES	1790
<i>Yasmine Kheira Benkouider ; Moussa Sofiane Karoui</i>	
BLACK-BOX DECISION BASED ADVERSARIAL ATTACK WITH SYMMETRIC α-STABLE DISTRIBUTION	1795
<i>Vignesh Srinivasan ; Ercan E. Kuruoglu ; Klaus-Robert Müller ; Wojciech Samek ; Shinichi Nakajima</i>	
REVERSIBLE PRIVACY PRESERVATION USING MULTI-LEVEL ENCRYPTION AND COMPRESSIVE SENSING	1800
<i>Mehmet Yamaç ; Mete Ahishali ; Nikolaos Passalis ; Jenni Raitoharju ; Bulent Sankur ; Moncef Gabbouj</i>	
OPTIMIZATION OF SIGNAL PROCESSING CHAINS: APPLICATION TO CASCADED FILTERS	1805
<i>A. Hügeat ; J. Betnard ; J.-M. Friedt ; P.-Y. Bourgeois ; G. Goavec-Merou</i>	
NON-CENTRALIZED NAVIGATION FOR SOURCE LOCALIZATION BY COOPERATIVE UAVS	1810
<i>Anna Guerra ; Davide Dardari ; Petar M. Djuric</i>	
JOINT UNMIXING-DECONVOLUTION ALGORITHMS FOR HYPERSPECTRAL IMAGES	1815
<i>Yingying Song ; El-Hadi Djermoune ; David Brie ; Cédric Richard</i>	
LÖWNER-BASED TENSOR DECOMPOSITION FOR BLIND SOURCE SEPARATION IN ATRIAL FIBRILLATION ECGS	1820
<i>Pedro Marinho R. De Oliveira ; Vicente Zarzoso</i>	
COMPRESSED SENSING FOR THE EXTRACTION OF ATRIAL FIBRILLATION PATTERNS FROM SURFACE ELECTROCARDIOGRAMS	1825
<i>Amina Ghrissi ; Vicente Zarzoso</i>	
HVS BASED PERCEPTUAL PRE-PROCESSING FOR VIDEO CODING	1830
<i>Madhukar Bhat ; Jean-Marc Thiessé ; Patrick Le Callet</i>	
A NEW WEIGHTED NMF ALGORITHM FOR MISSING DATA INTERPOLATION AND ITS APPLICATION TO SPEECH ENHANCEMENT	1835
<i>Sushmita Thakallapalli ; Suryakanth Gangashetty ; Nilesh Madhu</i>	
NOVEL SENSING MECHANISM FOR FULL-DUPLEX SECONDARY USERS IN COGNITIVE RADIO	1840
<i>M. R. Mortada ; A. Nasser ; A. Mansour ; K. C. Ya</i>	
REAL-TIME HAND GESTURE RECOGNITION MODEL USING DEEP LEARNING TECHNIQUES AND EMG SIGNALS	1845
<i>Edison A. Chung ; Marco E. Benalcázar</i>	
OPEN-SET RECOGNITION USING INTRA-CLASS SPLITTING	1850
<i>Patrick Schlachter ; Yiwen Liao ; Bin Yang</i>	
ONE-CLASS FEATURE LEARNING USING INTRA-CLASS SPLITTING	1855
<i>Patrick Schlachter ; Yiwen Liao ; Bin Yang</i>	
AN ENVIRONMENT FOR GESTURAL INTERACTION WITH 3D VIRTUAL MUSICAL INSTRUMENTS AS AN EDUCATIONAL TOOL	1860
<i>C. Garoufis ; A. Zlatintsi ; K. Kritsis ; P. P. Filntisis ; V. Katsouros ; P. Maragos</i>	
IEST: INTERPOLATION-ENHANCED SHEARLET TRANSFORM FOR LIGHT FIELD RECONSTRUCTION USING ADAPTIVE SEPARABLE CONVOLUTION	1865
<i>Yuan Gao ; Reinhard Koch ; Robert Bregovic ; Atanas Gotchev</i>	

HUE MODIFICATION LOCALIZATION BY PAIR MATCHING	1870
<i>Quoc-Tin Phan ; Michele Vascotto ; Giulia Boato</i>	
DEEP REINFORCEMENT LEARNING FOR AUTONOMOUS MODEL-FREE NAVIGATION WITH PARTIAL OBSERVABILITY	1875
<i>Daniel Tapia ; Juan Parras ; Santiago Zazo</i>	
A BLIND RECONSTRUCTION ALGORITHM FOR LEVEL-CROSSING ANALOG-TO-DIGITAL CONVERSION	1880
<i>Antoine Souloumiac</i>	
NODE ACTIVITY MONITORING IN HETEROGENEOUS NETWORKS USING ENERGY SENSORS	1885
<i>Jesus Perez ; Javier Via ; Luis Vielva</i>	
LEARNING OF IMAGE DEHAZING MODELS FOR SEGMENTATION TASKS	1890
<i>Sébastien De Blois ; Ihsen Hedhli ; Christian Gagné</i>	
GESTUREKEEPER: GESTURE RECOGNITION FOR CONTROLLING DEVICES IN IOT ENVIRONMENTS	1895
<i>Vasileios Sideridis ; Andrew Zacharakis ; George Tzagkarakis ; Maria Papadopouli</i>	
GATED GRAPH CONVOLUTIONAL RECURRENT NEURAL NETWORKS	1900
<i>Luana Ruiz ; Fernando Gama ; Alejandro Ribeiro</i>	
BEV OBJECT TRACKING FOR LIDAR-BASED GROUND TRUTH GENERATION	1905
<i>David Montero ; Nerea Aranjuelo ; Orti Senderos ; Marcos Nieto</i>	
DNN SPEAKER EMBEDDINGS USING AUTOENCODER PRE-TRAINING	1910
<i>Umair Khan ; Javier Hernando</i>	
EFFICIENT DISTRIBUTED PROCESSING FOR LARGE SCALE MIMO DETECTION	1915
<i>Messaoud Ahmed Ouameur ; Daniel Massicotte</i>	
VIRTUAL ADVERSARIAL TRAINING FOR SEMI-SUPERVISED VERIFICATION TASKS	1920
<i>Vahid Noroozi ; Sara Bahaadini ; Lei Zheng ; Sihong Xie ; Philip S. Yu</i>	
DETECTION, ENUMERATION AND LOCALIZATION OF UNDERWATER ACOUSTIC SOURCES	1925
<i>P. V. Nagesha ; G. V. Anand ; N. Kalyanasundaram ; Sanjeev Gurugopinath</i>	
DEEP CONVOLUTIONAL AND LSTM NEURAL NETWORK ARCHITECTURES ON LEAP MOTION HAND TRACKING DATA SEQUENCES	1930
<i>Kosmas Kritsis ; Maximos Kaliakatsos-Papakostas ; Vassilis Katsouras ; Aggelos Pikrakis</i>	
RANDOM GABOR MULTIPLIERS FOR COMPRESSIVE SENSING: A SIMULATION STUDY	1935
<i>Shristi Rajbanshi ; Georg Tauböck ; Peter Balazs ; Luís Daniel Abreu</i>	
A NEW METRIC TO EVALUATE AUDITORY ATTENTION DETECTION PERFORMANCE BASED ON A MARKOV CHAIN	1940
<i>Simon Geirnaert ; Tom Francart ; Alexander Bertrand</i>	
ENERGY SEPARATION ALGORITHM BASED SPECTRUM ESTIMATION FOR VERY SHORT DURATION OF SPEECH	1945
<i>Hemant A. Patil ; Srikant Viswanath</i>	
SPECTRAL VISIBILITY GRAPHS: APPLICATION TO SIMILARITY OF HARMONIC SIGNALS	1950
<i>Delia Fano Yela ; Dan Stowell ; Mark Sandler</i>	
HMM-BASED CONVOLUTIONAL LSTM FOR VISUAL SCANPATH PREDICTION	1955
<i>Ashish Verma ; Debashis Sen</i>	
COMBINING EVIDENCES FROM VARIABLE TEAGER ENERGY SOURCE AND MEL CEPSTRAL FEATURES FOR CLASSIFICATION OF NORMAL VS. PATHOLOGICAL VOICES	1960
<i>Hemant A. Patil</i>	
JAMMER DETECTION IN M-QAM-OFDM BY LEARNING A DYNAMIC BAYESIAN MODEL FOR THE COGNITIVE RADIO	1965
<i>Ali Krayani ; Muhammad Farrukh ; Mohamad Baydoun ; Lucio Marcenaro ; Yue Gao ; Carlo S. Regazzoni</i>	
JOINT USER GROUPING AND POWER ALLOCATION FOR MISO SYSTEMS: LEARNING TO SCHEDULE	1970
<i>Yaxiong Yuan ; Thang X. Vu ; Lei Lei ; Symeon Chatzinotas ; Björn Ottersten</i>	
IMPACT SOUNDS CLASSIFICATION FOR INTERACTIVE APPLICATIONS VIA DISCRIMINATIVE DICTIONARY LEARNING	1975
<i>Christos Tzagkarakis ; Nikolaos Stefanakis ; George Tzagkarakis</i>	
A BIOLOGICALLY CONSTRAINED ENCODING SOLUTION FOR LONG-TERM STORAGE OF IMAGES ONTO SYNTHETIC DNA	1980
<i>Melpomeni Dimopoulou ; Marc Antonini ; Pascal Barbry ; Raja Appuswamy</i>	
DEFACTO: IMAGE AND FACE MANIPULATION DATASET	1985
<i>Gaël Mahfoudi ; Badr Tajini ; Florent Reiraint ; Frédéric Morain-Nicolier ; Jean Luc Dugelay ; Marc Pic</i>	

AUTOMATIC PLAYLIST GENERATION USING CONVOLUTIONAL NEURAL NETWORKS AND RECURRENT NEURAL NETWORKS	1990
<i>Rosilde Tatiana Irene ; Clara Borrelli ; Massimiliano Zanoni ; Michele Buccoli ; Augusto Sarti</i>	
TENSOR-TRAIN MODELING FOR MIMO-OFDM TENSOR CODING-AND-FORWARDING RELAY SYSTEMS.....	1995
<i>Yassine Zniyed ; Rémy Boyer ; André L. F. De Almeida ; Gérard Favier</i>	
AUTO-CALIBRATION OF UNIFORM LINEAR ARRAY ANTENNAS.....	2000
<i>Tomas McKelvey</i>	
MODEL-BASED OPTIMIZATION OF A LOW-DIMENSIONAL MODULATION FILTER BANK FOR DRR AND T60 ESTIMATION	2005
<i>Semih Agcaer ; Rainer Martin</i>	
SEGMENTATION OF HEAD AND NECK TUMOURS USING MODIFIED U-NET.....	2010
<i>Baixiang Zhao ; John Soraghan ; Gaetano Di Caterina ; Derek Grose</i>	
UNDERSTANDING SUPPORT VECTOR MACHINES WITH POLYNOMIAL KERNELS	2014
<i>Rikard Vinge ; Tomas McKelvey</i>	
MALWARE IDENTIFICATION WITH DICTIONARY LEARNING	2019
<i>Paul Irofti ; Andra Baltoiu</i>	
IMPROVING SINGING VOICE SEPARATION USING DEEP U-NET AND WAVE-U-NET WITH DATA AUGMENTATION	2024
<i>Alice Cohen-Hadria ; Axel Roebel ; Geoffroy Peeters</i>	
DEEP TRANSFER LEARNING FOR SINGLE-CHANNEL AUTOMATIC SLEEP STAGING WITH CHANNEL MISMATCH	2029
<i>Huy Phan ; Oliver Y. Chén ; Philipp Koch ; Alfred Mertins ; Maarten De Vos</i>	
DATA AUGMENTATION FOR DRUM TRANSCRIPTION WITH CONVOLUTIONAL NEURAL NETWORKS.....	2034
<i>Céline Jacques ; Axel Roebel</i>	
BLOCK SPARSITY-BASED DOA ESTIMATION WITH SENSOR GAIN AND PHASE UNCERTAINTIES	2039
<i>Huiping Huang ; Michael Fauß ; Abdelhak M. Zoubir</i>	
OPTIMIZED REFERENCE PICTURE SELECTION FOR LIGHT FIELD IMAGE CODING	2044
<i>J. S. Ricardo Monteiro ; M. M. Nuno Rodrigues ; M. M. Sérgio Faria ; J. L. Paulo Nunes</i>	
PATH LOSS AT 5 GHZ AND 31 GHZ FOR TWO DISTINCT INDOOR AIRPORT SETTINGS	2049
<i>David W. Matolak ; Mohanad Mohsen ; Jinming Chen</i>	
SINGLE IMAGE EAR RECOGNITION USING WAVELET-BASED MULTI-BAND PCA.....	2054
<i>Matthew Zarachoff ; Akbar Sheikh-Akbari ; Dorothy Monekosso</i>	
COMPUTER AID-SYSTEM TO IDENTIFY THE FIRST STAGE OF PROSTATE CANCER THROUGH DEEP-LEARNING TECHNIQUES.....	2058
<i>José Gabriel García ; Adrián Colomer ; Fernando López-Mir ; José M. Mossi ; Valery Naranjo</i>	
HYPER-PARAMETER SELECTION ON CONVOLUTIONAL DICTIONARY LEARNING THROUGH LOCAL $L_{0,\infty}$ NORM	2063
<i>Gustavo Silva ; Jorge Quesada ; Paul Rodriguez</i>	
TEMPORAL CONVOLUTIONAL NETWORKS FOR MUSICAL AUDIO BEAT TRACKING.....	2068
<i>Matthew E. P. Davies ; Sebastian Böck</i>	
PREDICTION RESIDUE ANALYSIS IN MPEG-2 DOUBLE COMPRESSED VIDEO SEQUENCES.....	2073
<i>D. Vázquez-Padín ; Fernando Pérez-González</i>	
HETEROGENEOUS NETWORK LOCALIZATION WITH A DISTRIBUTED PHASED ARRAY COMPOSED OF COOPERATIVE VEHICLES.....	2078
<i>Siwei Zhang ; Robert Pöhlmann ; Armin Dammann</i>	
SELF-LOCALIZATION OF DISTRIBUTED MICROPHONE ARRAYS USING DIRECTIONAL STATISTICS WITH DOA ESTIMATION RELIABILITY.....	2083
<i>Szymon Wozniak ; Konrad Kowalczyk ; Maximo Cobos</i>	
A PARALLEL SPARSE REGULARIZATION METHOD FOR STRUCTURED MULTILINEAR LOW-RANK TENSOR DECOMPOSITION.....	2088
<i>Gerta Kushe ; Yang Yang ; Christian Steffens ; Marius Pesavento</i>	
MULTIMODAL IMAGE SUPER-RESOLUTION VIA DEEP UNFOLDING WITH SIDE INFORMATION	2093
<i>Iman Marivani ; Evaggelia Tsiligianni ; Bruno Cornelis ; Nikos Deligiannis</i>	
LARGE-SCALE POLLEN RECOGNITION WITH DEEP LEARNING	2098
<i>André R. De Geus ; Celia A. Z. Barcelos ; Marcos A. Batista ; Sérgio F. Da Silva</i>	
FINGERSPELLED ALPHABET SIGN RECOGNITION IN UPPER-BODY VIDEOS.....	2103
<i>Katerina Papadimitriou ; Gerasimos Potamianos</i>	

FREE REGISTRATION BASED SHAPE PRIOR FOR ACTIVE CONTOURS	2108
<i>Ines Sakly ; Mohamed Amine Mezghich ; Slim M'Hiri ; Faouzi Ghorbel</i>	
A COMPARISON OF MACHINE LEARNING METHODS FOR DETECTING RIGHT WHALES FROM AUTONOMOUS SURFACE VEHICLES	2113
<i>W. Vickers ; B. Milner ; R. Lee ; J. Lines</i>	
MONAURAL SPEECH SEPARATION WITH DEEP LEARNING USING PHASE MODELLING AND CAPSULE NETWORKS	2118
<i>Toby Staines ; Tillman Weyde ; Oleksandr Galkin</i>	
ON-IN: AN ON-NODE AND IN-NODE BASED MECHANISM FOR BIG DATA COLLECTION IN LARGE-SCALE SENSOR NETWORKS	2123
<i>Marwa Ibrahim ; Hassan Harb ; Abbass Nasser ; Ali Mansour ; Christophe Osswald</i>	
ON THE PHYSICAL LAYER SECURITY OF IOT DEVICES OVER SATELLITE	2128
<i>Joan Bas ; Ana Pérez-Neira</i>	
GAUSS-HERMITE QUADRATURE FOR NON-GAUSSIAN INFERENCE VIA AN IMPORTANCE SAMPLING INTERPRETATION	2133
<i>Victor Elvira ; Pau Closas ; Luca Martino</i>	
OPTIMIZATION OF THE RADIO ACCESS TO PROVIDE VEHICULAR COMMUNICATIONS BASED ON DRIVE TESTS	2138
<i>Alberto Álvarez Polegre ; Raquel Pérez Leal ; José Antonio García García ; Ana García Armada</i>	
FULLY PROXIMAL SPLITTING ALGORITHMS IN IMAGE RECOVERY	2143
<i>Patrick L. Combettes ; Lilian E. Glaudin</i>	
TOWARDS AUTOMATIC GLAUCOMA ASSESSMENT: AN ENCODER-DECODER CNN FOR RETINAL LAYER SEGMENTATION IN RODENT OCT IMAGES	2148
<i>Rocío Del Amor ; Sandra Morales ; Adrián Colomer ; José M. Mossi ; David Woldbye ; Kristian Klemp ; Michael Larsen ; Valery Naranjo</i>	
SPEECH-BASED STRESS CLASSIFICATION BASED ON MODULATION SPECTRAL FEATURES AND CONVOLUTIONAL NEURAL NETWORKS	2153
<i>Anderson R. Avila ; Shruti R. Kshirsagar ; Abhishek Tiwari ; Daniel Lafond ; Douglas O'Shaughnessy ; Tiago H. Falk</i>	
HEART DISEASE DETECTION ARCHITECTURE FOR LEAD I OFF-THE-PERSON ECG MONITORING DEVICES	2158
<i>Pedro Sá ; Helena Aidos ; Nuno Roma ; Pedro Tomás</i>	
NEURO-INSPIRED COMPRESSION OF RGB IMAGES	2163
<i>Effrosyni Doutsis ; George Tzagkarakis ; Panagiotis Tsakalides</i>	
GRAPH FILTER DESIGN USING SUM-OF-SQUARES REPRESENTATION	2168
<i>Tuomas Aittomäki ; Geert Leus</i>	
A HIGHLY RELIABLE WRIST-WORN ACCELERATION-BASED FALL DETECTOR	2173
<i>Majd Saleh ; Nawras Georgi ; Manuel Abbas ; Régine Le Bouquin Jeannès</i>	
TEXTURE SUPERPIXEL CLUSTERING FROM PATCH-BASED NEAREST NEIGHBOR MATCHING	2178
<i>Rémi Giraud ; Yannick Berthoumieu</i>	
NON-DESTRUCTIVE PREDICTION OF PORK MEAT DEGRADATION USING A STACKED AUTOENCODER CLASSIFIER ON HYPERSPECTRAL IMAGES	2183
<i>B. B. Gallo ; S. J. M. De Almeida ; J. C. M. Bermudez ; J. Chen ; C. Richard</i>	
IMPROVED REGULARIZED RECONSTRUCTION FOR SIMULTANEOUS MULTI-SLICE CARDIAC MRI T₁ MAPPING	2188
<i>Ömer Burak Demirel ; Sebastian Weingärtner ; Steen Moeller ; Mehmet Akçakaya</i>	
CAUCHY MULTICHANNEL SPEECH ENHANCEMENT WITH A DEEP SPEECH PRIOR	2193
<i>Mathieu Fontaine ; Aditya Arie Nugraha ; Roland Badeau ; Kazuyoshi Yoshii ; Antoine Liutkus</i>	
A NOVEL PARTICLE FILTER FOR HIGH-DIMENSIONAL SYSTEMS USING PENALIZED PERTURBATIONS	2198
<i>Yousef El-Laham ; Zahraa Krayem ; Jessica Maghakian ; Mónica Bugallo</i>	
POWER DISTRIBUTION INSULATORS CLASSIFICATION USING IMAGE HYBRID DEEP LEARNING	2203
<i>Eduardo F. Simas Filho ; Ricardo M. Prates ; Rodrigo P. Ramos ; Jaime S. Cardoso</i>	
GPR ANTENNA LOCALIZATION BASED ON A-SCANS	2208
<i>Evangelos Skartados ; Andreas Kargakos ; Efthimios Tsiogas ; Ioannis Kostavelis ; Dimitrios Giakoumis ; Dimitrios Tzovaras</i>	
A MULTITARGET TRACKING METHOD FOR ESTIMATING CAROTID ARTERY WALL MOTION FROM ULTRASOUND SEQUENCES	2213
<i>Jan Dorazil ; Rene Repp ; Thomas Kropfleiter ; Richard Prüller ; Kamil Ríha ; Franz Hlawatsch</i>	

REPRODUCIBILITY OF DEEP CNN FOR BIOMEDICAL IMAGE PROCESSING ACROSS FRAMEWORKS AND ARCHITECTURES	2218
<i>Stefano Marrone ; Stefano Olivieri ; Gabriele Piantadosi ; Carlo Sansone</i>	
LOW-COMPLEXITY HYBRID TRANSCEIVERS FOR UPLINK MULTIUSER MMWAVE MIMO BY USER CLUSTERING	2223
<i>Darian Pérez-Adán ; José P. González-Coma ; Óscar Fresnedo ; Luis Castedo</i>	
SUBSAMPLING OF MULTIVARIATE TIME-VERTEX GRAPH SIGNALS	2228
<i>Pierre Humbert ; Laurent Oudre ; Nicolas Vayatis</i>	
HARMONIC NETWORKS WITH LIMITED TRAINING SAMPLES	2233
<i>Matej Ulicny ; Vladimir A. Krylov ; Rozenn Dahyot</i>	
GLOBALLY OPTIMAL TIN STRATEGIES WITH TIME-SHARING IN THE MISO INTERFERENCE CHANNEL	2238
<i>Christoph Hellings ; Bho Matthiesen ; Eduard A. Jorswieck ; Wolfgang Utschick</i>	
TWO-WAY MIMO DECODE-AND-FORWARD RELAYING SYSTEMS WITH TENSOR SPACE-TIME CODING	2243
<i>Walter Da C. Freitas ; Gérard Favier ; André L. F. De Almeida ; Martin Haardt</i>	
FAST ALIGNMENT OF LIMITED ANGLE TOMOGRAMS BY PROJECTED CROSS CORRELATION	2248
<i>Ricardo M. Sánchez ; Rudolf Mester ; Mikhail Kudryashev</i>	
RANK ESTIMATION AND TENSOR DECOMPOSITION USING PHYSICS-DRIVEN CONSTRAINTS FOR BRAIN SOURCE LOCALIZATION	2253
<i>Nasrin Taheri ; Amar Kachenoura ; Ahmad Karfoul ; Xu Han ; Karim Ansari-Asl ; Isabelle Merletl Lotfi Senhadji ; Lotfi Senhadji ; Laurent Albera</i>	
HOW TO APPLY RANDOM PROJECTIONS TO NONNEGATIVE MATRIX FACTORIZATION WITH MISSING ENTRIES?	2257
<i>Farouk Yahaya ; Matthieu Puigt ; Gilles Delmaire ; Gilles Roussel</i>	
SUBJECTIVE EVALUATION OF LIGHT FIELD IMAGE COMPRESSION METHODS BASED ON VIEW SYNTHESIS	2262
<i>Nader Bakir ; Sid Ahmed Fezza ; Wassim Hamidouche ; Khouloud Samrouth ; Olivier Déforges</i>	
OPTIMUM TRAJECTORY PLANNING FOR ROBOTIC DATA FERRIES IN DELAY TOLERANT WIRELESS SENSOR NETWORKS	2267
<i>Edmond Nurellari ; Daniel Bonilla Licea ; Mounir Ghogho</i>	
MODIFIED U-NET FOR AUTOMATIC BRAIN TUMOR REGIONS SEGMENTATION	2272
<i>Keerati Kaewrak ; John Soraghan ; Gaetano Di Caterina ; Derek Grose</i>	
SPECTRAL COEXISTENCE OF 5G NETWORKS AND SATELLITE COMMUNICATION SYSTEMS ENABLED BY COORDINATED CACHING AND QOS-AWARE RESOURCE ALLOCATION	2277
<i>Konstantinos Ntougias ; Constantinos B. Papadias ; Georgios K. Papageorgiou ; Gerhard Hasslinger</i>	
ANTENNA CONTROLLER FOR LOW-LATENCY AND HIGH RELIABILITY ROBOTIC COMMUNICATIONS OVER TIME-VARYING FADING CHANNELS	2282
<i>Daniel Bonilla Licea ; Mounir Ghogho ; Des McLernon ; Syed A. R. Zaidi</i>	
DECENTRALIZED MULTI-AGENT DEEP REINFORCEMENT LEARNING IN SWARMS OF DRONES FOR FLOOD MONITORING	2287
<i>David Baldazo ; Juan Parras ; Santiago Zazo</i>	
ANALYSIS OF NEMATODES IN COFFEE CROPS AT DIFFERENT ALTITUDES USING AERIAL IMAGES	2292
<i>Alexandre J. Oliveira ; Gleice A. Assis ; Elaine R. Faria ; Jefferson R. Souza ; Kelen C. T. Vivaldini ; Vitor Guizilini ; Fabio Ramos ; C. T. Caio Mendes ; Denis F. Wolf</i>	
TENSOR FACTORISATION AND TRANSFER LEARNING FOR SLEEP POSE DETECTION	2297
<i>Sara Mahvash Mohammadi ; Samaneh Kouchaki ; Saeid Sanei ; Derk-Jan Dijk ; Adrian Hilton ; Kevin Wells</i>	
COMPRESSIVE CHIRP TRANSFORM FOR ESTIMATION OF CHIRP PARAMETERS	2302
<i>Luay Ali Al Irkhis ; Arnab K. Shaw</i>	
LARGE-SCALE CANONICAL POLYADIC DECOMPOSITION VIA REGULAR TENSOR SAMPLING	2307
<i>Charilaos I. Kanatsoulis ; Nicholas D. Sidiropoulos</i>	
FAST SURFACE DETECTION IN SINGLE-PHOTON LIDAR WAVEFORMS	2312
<i>J. Tachella ; Y. Altmann ; S. McLaughlin ; J.-Y. Tourneret</i>	
DUAL FUNCTION FH MIMO RADAR SYSTEM WITH DPSK SIGNAL EMBEDDING	2317
<i>Indu Priya Eedara ; Moeness G. Amin</i>	
SCHEDULING DATA EMBEDDING IN DUAL FUNCTION RADAR NETWORKS	2322
<i>Moeness G. Amin ; Yunhan Dong ; Giuseppe A. Fabrizio</i>	

RELIABLE DEMOSAICING DETECTION FOR IMAGE FORENSICS	2327
<i>Quentin Bammev ; Rafael Grompone Von Gioi ; Jean-Michel Morel</i>	
GEARBOX FAULT DIAGNOSIS USING CONVOLUTIONAL NEURAL NETWORKS AND SUPPORT VECTOR MACHINES	2332
<i>Zhuyun Chen ; Chenyu Liu ; Konstantinos Gryllias ; Weihua Li</i>	
A NOVEL RESYNCHRONIZATION PROCEDURE FOR HAND-LIPS FUSION APPLIED TO CONTINUOUS FRENCH CUED SPEECH RECOGNITION	2337
<i>Li Liu ; Gang Feng ; Denis Beautemps ; Xiao-Ping Zhang</i>	
A COMPOSITE DISCRIMINATOR FOR GENERATIVE ADVERSARIAL NETWORK BASED VIDEO SUPER-RESOLUTION	2342
<i>Xijun Wang ; Alice Lucas ; Santiago Lopez-Tapia ; Xinyi Wu ; Rafael Molina ; Aggelos K. Katsaggelos</i>	
END-TO-END LANGUAGE IDENTIFICATION USING A RESIDUAL CONVOLUTIONAL NEURAL NETWORK WITH ATTENTIVE TEMPORAL POOLING	2347
<i>João Monteiro ; Jahangir Alam ; Gautam Bhattacharya ; Tiago H. Falk</i>	
FINDING COMMON IMAGE SEMANTICS FOR URBAN PERCEIVED SAFETY BASED ON PAIRWISE COMPARISONS	2352
<i>Gabriel Costa ; Claudia Soares ; Manuel Marques</i>	
SEMANTIC PRIOR BASED GENERATIVE ADVERSARIAL NETWORK FOR VIDEO SUPER-RESOLUTION	2357
<i>Xinyi Wu ; Alice Lucas ; Santiago Lopez-Tapia ; Xijun Wang ; Yul Hee Kim ; Rafael Molina ; Aggelos K. Katsaggelos</i>	
DETECTING HIGHER ORDER GENOMIC VARIANT INTERACTIONS WITH SPECTRAL ANALYSIS	2362
<i>David Uminsky ; Mario Banuelos ; Lillian González-Albino ; Rosa Garza ; Sylvia Akueze Nwakanma</i>	
SEGMENTATION OF PIECEWISE ARX PROCESSES BY EXPLOITING SPARSITY IN TIGHT-DIMENSIONAL SPACES	2367
<i>Hiroki Kuroda ; Masao Yamagishi ; Isao Yamada</i>	
AN ADAPTIVE VIDEO ACQUISITION SCHEME FOR OBJECT TRACKING	2372
<i>Srutarshi Banerjee ; Juan G. Serra ; Henry H. Chopp ; Oliver Cossairt ; A. K. Katsaggelos</i>	
COMPRESSIVE INDEPENDENT COMPONENT ANALYSIS	2377
<i>Michael P. Sheehan ; Madeleine S. Kotzagiannidis ; Mike E. Davies</i>	
CONVEX OPTIMIZATION BASED SPARSE LEARNING OVER NETWORKS	2382
<i>Ahmed Zaki ; Saikat Chatterjee</i>	
ANALYSING DEEP LEARNING-SPECTRAL ENVELOPE PREDICTION METHODS FOR SINGING SYNTHESIS	2387
<i>Frederik Bous ; Axel Roebel</i>	
DEEP COMPLEX NEURAL NETWORK LEARNING FOR HIGH-VOLTAGE INSULATION FAULT CLASSIFICATION FROM COMPLEX BISPECTRUM REPRESENTATION	2392
<i>Imene Mitiche ; Mark David Jenkins ; Philip Boreham ; Alan Nesbitt ; Gordon Morison</i>	
COST-AWARE DUAL PREDICTION SCHEME FOR REDUCING TRANSMISSIONS AT IOT SENSOR NODES	2397
<i>Victor Watten Håkansson ; Naveen K. D. Venkategowda ; Frank Alexander Kraemer ; Stefan Werner</i>	
REALTIME 2-D DOA ESTIMATION USING PHASE-DIFFERENCE PROJECTION (PDP)	2402
<i>Hui Chen ; Tariq Ballal ; Xing Liu ; Tareq Y. Al-Naffouri</i>	
SECURE DICTIONARY LEARNING FOR SPARSE REPRESENTATION	2407
<i>Takayuki Nakachi ; Yukihiko Bandoh ; Hitoshi Kiya</i>	
IDENTIFICATION OF ALZHEIMER'S DISEASE USING NON-LINGUISTIC AUDIO DESCRIPTORS	2412
<i>Chitrlekha Bhat ; Sunil Kumar Kopparapu</i>	
MULTI-POINT CONNECTIVITY FOR RELIABLE MMWAVE	2417
<i>Dileep Kumar ; Jarkko Kaleva ; Antti Tölli</i>	
INHOMOGENEOUSLY STACKED RNN FOR RECOGNIZING HAND GESTURES FROM MAGNETOMETER DATA	2422
<i>Philipp Koch ; Mark Dreier ; Martina Böhme ; Marco Maass ; Huy Phan ; Alfred Mertins</i>	
ROBUST SELF-LOCALIZATION OF MICROPHONE ARRAYS USING A MINIMUM NUMBER OF ACOUSTIC SOURCES	2427
<i>Matthias Schrammen ; Ahmad Hamad ; Peter Jax</i>	
A QUALITY OF RECOGNITION CASE STUDY: TEXTURE-BASED SEGMENTATION AND MRI QUALITY ASSESSMENT	2432
<i>Rafael Rodrigues ; Antonio M. G. Pinheiro</i>	
RETHINKING SAMPLING IN PARALLEL MRI: A DATA-DRIVEN APPROACH	2437
<i>Baran Gözcü ; Thomas Sanchez ; Volkan Cevher</i>	

FPGA IMPLEMENTATION OF A TVWS UP- AND DOWNCONVERTER USING NON-POWER-OF-TWO FFT MODULATED FILTER BANKS.....	2442
<i>Vianney Anis ; Jincheng Guo ; Stephan Weiss ; Louise H. Crockett</i>	
WIRELESS MULTI-GROUP MULTICAST PRECODING WITH SELECTIVE RF ENERGY HARVESTING	2447
<i>Sumit Gautam ; Eva Lagunas ; Symeon Chatzinotas ; Björn Ottersten</i>	
FACE-AWARE SALIENCY ESTIMATION MODEL FOR 360° IMAGES	2452
<i>Pramit Mazumdar ; Giuliano Arru ; Marco Carli ; Federica Battisti</i>	
SIGNAL RECOVERY FROM PHASELESS MEASUREMENTS OF SPHERICAL HARMONICS EXPANSION.....	2457
<i>Arya Bangun ; Arash Behboodi ; Rudolf Mathar</i>	
DIRECT LOCALIZATION BY PARTLY CALIBRATED ARRAYS: A RELAXED MAXIMUM LIKELIHOOD SOLUTION.....	2462
<i>Amir Adler ; Mati Wax</i>	
LINEAR APPROXIMATION OF DEEP NEURAL NETWORKS FOR EFFICIENT INFERENCE ON VIDEO DATA.....	2467
<i>Bodo Rueckauer ; Shih-Chii Liu</i>	
SPARSE BAYESIAN LEARNING FOR A BILINEAR CALIBRATION MODEL AND MISMATCHED CRB	2472
<i>Kalyana Gopala ; Christo Kurisummoottil Thomas ; Dirk Slock</i>	
AUDIO-VISUAL SPEECH ENHANCEMENT USING HIERARCHICAL EXTREME LEARNING MACHINE	2477
<i>Tassadaq Hussain ; Yu Tsao ; Hsin-Min Wang ; Jia-Ching Wang ; Sabato Marco Siniscalchi ; Wen-Hung Liao</i>	
LOW-RANK APPROXIMATION VIA THE GENERALIZED REWEIGHTED ITERATIVE NUCLEAR NORM.....	2482
<i>Yan Huang ; Lan Lan ; Lei Zhang</i>	
SOUND-BASED DISTANCE ESTIMATION FOR INDOOR NAVIGATION IN THE PRESENCE OF EGO NOISE	2487
<i>Usama Saqib ; Jesper Rindom Jensen</i>	
Author Index	