

# Journal of Signal Processing 「信号処理」 Vol. 12, Nos. 1-6, 2008

## 全掲載記事・論文 総目次

---

### Vol. 12, No. 1

---

Journal of Signal Processing 「信号処理」 .....	2
Special Issue on Nonlinear Circuits and Signal Processing: Editor's Note .....	Hiroyuki Yashima 4
INVITED PAPER Speech Prosody in Spoken Language Technologies .....	Keikichi Hirose 7
PAPER Critical Temperature Sensor Based on Oscillatory Neuron Models .....	Gessyca Maria Tovar, Tetsuya Asai, Tetsuya Hirose and Yoshihito Amemiya 17
PAPER User Authentication Protocol Using Chaotic Maps .....	Shuichi Aono and Yoshifumi Nishio 25
PAPER Estimation of Fundamental Frequency of Reverberant Speech by Utilizing Complex Cepstrum Analysis .....	Masashi Unoki and Toshihiro Hosorogiya 31
PAPER Evaluation of Spatially Adaptive Dynamic-Range-Compression Processing .....	Sousuke Shimoyama, Masayuki Ikebe and Masaki Igarashi 45
PAPER Lossless Parallel Image Coding Based on Lifting Scheme Using Discrete-Time Cellular Neural Network Having Multi-Templates .....	Hisashi Aomori, Satoshi Yamashita, Tsuyoshi Otake, Nobuaki Takahashi and Mamoru Tanaka 55
PAPER Efficient Multistate Estimated Architecture of CABAC for H.264/AVC Encoder .....	Tian Song, Atsushi Yamada and Takashi Shimamoto 65
PAPER Computer-Aided Diagnostic Scheme for Detection of Acute Cerebral Infarctions on Brain CT Images .....	Hiroyuki Nagashima and Tetsumi Harakawa 73
PAPER Feature Extraction of Surface Electromyography Signal During Forearm Supination and Forearm Pronation .....	Xiao Hu, Qun Yu and Zaihai Yu 81
PAPER Robust Fault Estimator Design for Linear Parameter-Varying Systems .....	Ping Cui and Zhengxin Weng 89
PAPER Nonfragile Guaranteed Cost Control for Nonlinear Discrete-Time Uncertain Systems with State Delays .....	Xiaosheng Fang and Jingcheng Wang 97
「非線形回路と信号処理特集号」のお知らせと論文投稿のお願い .....	103

---

### Vol. 12, No. 2

---

「信号処理学会」／Journal of Signal Processing 「信号処理」 .....	106
学術の窓 雑音で劣化したカラー画像信号の復元 .....	田口 亮 107
基礎シリーズ 強化学習に基づく音声認識（２）—大語彙連続音声認識への適用— .....	西田昌史 117
私の研究遍歴（その１） .....	和泉正哲 123
先端技術解説 車載地上デジタル放送受信技術 .....	伊東 毅 133
論文 高速 H <sub>∞</sub> フィルタの効率的実装と携帯電話用エコーキャンセラへの応用 .....	

	..... 勝俣友紀, 西山 清, 佐藤克昌, 三澤栄治	143
論文	完全シフト不変性を実現する複素数離散ウェーブレット変換 .....	戸田 浩, 章 忠 155
PAPER	IIR Multiple-Notch Filter Design with Optimum Pole Position	
	..... Surapun Yimman and Kobchai Dejhan	167
	「非線形回路と信号処理特集号」のお知らせと論文投稿のお願い .....	175

---

**Vol. 12, No. 3**

---

	「信号処理学会」/Journal of Signal Processing 「信号処理」 .....	178
	「第2回信号処理学会論文賞」受賞論文のお知らせ .....	179
基礎シリーズ	標本化・量子化で失った画像情報の回復 .....	田口 亮 181
私の研究遍歴 (その2)	..... 和泉正哲	189
研究室紹介	山内研究室 (立命館大学) .....	山内寛紀 201
PAPER	Data Hiding Method Using Patchwork Algorithm in DWPT Domain .....	Mariko Nakano-Miyatake, Jose Juan Garcia-Hernandez, Gabriel Cano-Rodríguez and Hector Pérez-Meana 217
PAPER	Real-Time Vehicle Type Recognition and Classification Based on Vehicle Profile	
	..... Yu Han and Shuguang Li	225
PAPER	A Control Method for Nonlinear Systems Using Simple Adaptive Control with Multiple Neural Networks .....	
	Muhammad Yasser, Takashi Yahagi, Agus Trisanto, Ayman Haggag and Jianming Lu	231
PAPER	A Novel Band Notched Antenna with Flat Group Delay for UWB Radio	
	..... Hui Zhu, Yuji Tanabe, Bo Huang, Tomoki Uwano and Takaaki Baba	245
信号処理学会論文賞規程	.....	253

---

**Vol. 12, No. 4**

---

Journal of Signal Processing 「信号処理」 .....	257
国際会議だより 2008 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'08)	
..... 谷萩隆嗣	259
Special Section on Papers Awarded the Student Paper Award at NCSP'08: Editor's Note .....	Tetsuya Shimamura 269
SELECTED PAPER	
An Effective Analytical Method for a Square Wave Oscillator Coupled by a Resistor	
..... Shingo Tomonaga, Yue Ma and Takuji Kousaka	271
Reliable Approach to Crosstalk Suppression by Decorrelating the Energy of BSS Outputs	
..... Kazuya Nakagawa, Kota Takahashi and Wataru Mitsuhashi	275
Probabilistic Information Processing on CAM2 with Mean Field Approximation .....	
Kazuhito Sakomizu, Tomohiro Fujita, Junji Ueda, Takashi Okamura, Kota Minoura and	
Takeshi Ogura	279
Complex Behavior in Simple Piecewise Smooth System with Spike Noise .....	
Takumi Suzuki, Shingo Tomonaga, Yue Ma, Soumitro Banerjee and Takuji Kousaka	283

Synchronization of Bidirectionally Coupled Neurons with Asymmetrical Inputs ..... Eri Ioka, Hiroyuki Kitajima and Kunichika Tsumoto	287
Analysis of Chaotic Neural Network through Mutual Information in Solving Quadratic Assignment Problems ..... Takahisa Ogino, Yoshihiko Horio and Kazuyuki Aihara	291
Neural Gas Containing Two Types of Neurons and Its Behaviors ..... Keiko Kanda, Haruna Matsushita and Yoshifumi Nishio	295
An Iterative Technique for the Design of FIR Digital Filters with Monotonic Transition Bands ..... Ken Kouno, Masahide Abe and Masayuki Kawamata	299
Estimation of Local Peaks Based on Particle Filter in Adverse Environments ..... Seiji Tomoike and Masato Akagi	303
Contour Extraction of the Right Atrium for the Thrombi Measurement in TEE Movies ..... Masami Aoki, Tadashi Yamaguchi and Hiroyuki Hachiya	307
MRI-Based Study on Morphological and Acoustic Properties of Mandarin Sustained Vowels ..... Gaowu Wang, Tatsuya Kitamura, Xugang Lu, Jianwu Dang and Jiangping Kong	311
A Study on Audio Watermarking Method Based on the Cochlear Delay Characteristics ..... Daiki Hamada and Masashi Unoki	315
Secure Interactive Smart Dissemination of JPEG 2000 Images ..... Ayman Haggag, Ahmed Afifi, Osama Ouda, Jianming Lu and Takashi Yahagi	319
A Study on the Blind Estimation of Reverberation Time in Room Acoustics ..... Sota Hiramatsu and Masashi Unoki	323
Fast Nonclosed-Form Higher-Order ICA with Frequency-Subband Selection Using Closed-Form Second-Order ICA ..... Kentaro Tachibana, Yu Takahashi, Yoshimitsu Mori, Hiroshi Saruwatari, Kiyohiro Shikano and Akira Tanaka	327
Traffic Control of Multiple Sweeping Robots in Panel Cruising Problem ..... Mayumi Morimoto, Takashi Yasuno, Emiko Yasuno, Hiroshi Suzuki and Hironobu Harada	331
信号処理学会論文賞規程 .....	335

---

**Vol. 12, No. 5**

---

「信号処理学会」 / Journal of Signal Processing 「信号処理」 .....	338
学術の窓 変調伝達関数に基づく音声信号処理 (1) - パワーエンベロープ逆フィルタ処理の原理とその応用について - .....	鶴木祐史 339
私の研究遍歴 (その3) .....	和泉正哲 349
研究室紹介 情報理論研究室 (明治大学) .....	荒川 薫 363
PAPER Reduced-Order Extended Kalman Filter for Rotor Flux and Speed Estimation in Speed-Sensorless Vector Control of Induction Motor .....	Maosong Tong and Shuguang Li 369
PAPER Phasewave Propagation Phenomena in Two-Layer Cellular Neural Networks ..... Koji Urabe, Yoshifumi Nishio and Zonghuang Yang	377
PAPER Fundamental Frequency Estimation of Single-Channel Noisy Speech Using Autocorrelation	

	Subtraction and Cosine Modulation .....	Keita Ogawa and Takeshi Fukabayashi	387
PAPER	Removing Poisson Noise from Image in Wavelet Domain .....	Yequi Li, Jianming Lu, Ling Wang and Takashi Yahagi	399
	2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'09) .....		407

---

**Vol. 12, No. 6**

---

	Journal of Signal Processing 「信号処理」 .....		410
	Special Issue on Nonlinear Circuits and Signal Processing: Editor's Note .....	Tetsuya Shimamura	412
PAPER	Evaluation of Queen Ant Strategy with Memory in Swarm Intelligence for Combinatorial Optimization Problems .....	Ichiro Imura and Shigeru Nakayama	415
PAPER	Analog MOS Circuits Implementing a Temporal Coding Neural Model .....	Gessyca Maria Tovar, Tetsuya Asai, Daichi Fujita and Yoshihito Amemiya	423
PAPER	Factors Affecting the Simulation of a Dynamical Pattern for Neuronal Activities Using Recurrent Neural Network .....	Masaaki Takahashi and Kiyohisa Natsume	433
PAPER	Central Pattern Generator Network with Independent Controllability .....	Tatsuji Tokiwa and Takeshi Yamakawa	441
PAPER	Enhancement of Palmprint Images Using an Optimized MLP Neural Network .....		
	Hillary Kipsang Choge, Tadahiro Oyama, Stephen Karungaru, Satoru Tsuge, Minoru Fukumi		449
PAPER	Apparent-Age Feature Extraction by Empirical Mode Decomposition .....		
	Hironobu Fukai, Hironori Takimoto, Yasue Mitsukura, Toshihisa Tanaka and Minoru Fukumi		457
PAPER	Objective Psychological Evaluation Using the EEG .....		
	Yohei Tomita, Shin-ichi Ito, Yasue Mitsukura, Naoko Koda, Jianting Cao and Minoru Fukumi		465
PAPER	Robust Voiced/Unvoiced Classification of Speech Signals Using Hilbert-Huang Transformation .....	Md. Khademul Islam Molla and Keikichi Hirose	473
PAPER	Switching Entropy Coding Architecture for High Bitrate H.264/AVC Applications .....	Tian Song, Yizhong Liu, Yoshinori Hayashi and Takashi Shimamoto	483
PAPER	Method for Concealed Object Detection Using Code Division Multiple Access-like Method with Modulated Ultrasonic Wave .....	Bo Huang, Peng Zhang, Syahrulanuar Ngah and Takaaki Baba	489
PAPER	Hammerstein System Identification by Combining Least-Squares Method with Particle Swarm Optimization .....	Tomohiro Hachino, Kenji Shimoda and Hitoshi Takata	497
PAPER	Several-Hours-Ahead Wind Speed Prediction System Using Hierarchical Neural Network .....	Hitoshi Sori and Takashi Yasuno	507
	Journal of Signal Processing 「信号処理」 Vol. 12, Nos. 1-6, 2008 全掲載記事・論文 総目次 .....		515
	2009 RISP International Workshop on Nonlinear Circuits and Signal Processing (NCSP'09) .....		519