

Session Schedule

| Date/Time | Ballroom 1 | Ballroom 2 | Ballroom 3 | Ballroom 4 |
|-------------------------|--|--|--|---|
| March 5, 10:00–11:40 | Speech Processing (1) 5AM1-1: | Intelligent Transport Systems 5AM1-2: | Bifurcation and Chaos 5AM1-3: | Optimization (1) 5AM1-4: |
| March 5, 13:00–14:40 | Speech Processing (2) 5PM1-1: | Coding (1) 5PM1-2: | Synchronization 5PM1-3: | Optimization (2) 5PM1-4: |
| March 5, 15:00–16:40 | Acoustic Signal Processing (1) 5PM2-1: | Coding (2) 5PM2-2: | Circuit Design (1) 5PM2-3: | [Special Session] Communication Sciences 5PM2-4: |
| March 6, 09:00–10:30 | Speech Processing (3) 6AM1-1: | Computer Vision (1) 6AM1-2: | Adaptive Systems and Control (1) 6AM1-3: | Optimization (3) 6AM1-4: |
| March 6, 10:40–12:00 | Image Processing (1) 6AM2-1: | Communications (1) 6AM2-2: | Modeling, Estimation and Prediction (1) 6AM2-3: | Nonlinear Systems and Networks 6AM2-4: |
| March 6, 13:20–15:00 | Image Processing (2) 6PM1-1: | [Special Session] Recent Advances in Communications, Networks, and Its Application Software 6PM1-2: | Adaptive Systems and Control (2) 6PM1-3: | Biological Systems and Networks (1) 6PM1-4: |
| March 6, 15:20–16:40 | Image Processing (3) 6PM2-1: | Communications (2) 6PM2-2: | Circuit Design (2) 6PM2-3: | Biological Systems and Networks (2) 6PM2-4: |
| March 7, 09:00–10:20 | Image Processing (4) 7AM1-1: | Acoustic Signal Processing (2) 7AM1-2: | Learning 7AM1-3: | Biological Systems and Networks (3) 7AM1-4: |
| March 7, 10:40–12:00 | Computer Vision (2) 7AM2-1: | Communications (3) 7AM2-2: | Modeling, Estimation and Prediction (2) 7AM2-3: | Nonlinear Circuits (1) 7AM2-4: |
| March 7, 13:20–15:00 | | Sensor Networks 7PM1-2: | Modeling, Estimation and Prediction (3) 7PM1-3: | Nonlinear Circuits (2) 7PM1-4: |

- Registration will be opened on March 4 (16:00–18:00) at “Meeting room 5”
- Registration on March 5 (9:00–17:00), 6 (8:30–17:00), and 7 (8:30–12:00) will be taken in front of the Ballrooms
- Banquet will be held on March 6 (17:00–20:00) at Luau (beach side)
- Farewell party & Student paper award ceremony will be held on March 7 (evening, after the sessions) at Luau

Advanced Program (2012/2/22)

5AM1-1: Speech Processing (1)

Date: March 5, 10:00–11:40
Room: Ballroom1
Chair: Masato Akagi (JAIST)

- 5AM1-1-1 Wideband Re-synthesis of Narrowband Speech using Discriminative Piecewise Linear Transformation** 1
Duy Duc Nguyen (The University of Tokyo), Masayuki Suzuki (The University of Tokyo), Nobuaki Minematsu (The University of Tokyo), Keikichi Hirose (The University of Tokyo)
- 5AM1-1-2 Matrix Rank Minimization to Sequential Signal Denoising based on Iterative Null Space Optimization** 5
Tomohiro Takahashi (Tokyo University of Science), Katsumi Konishi (Kogakuin University), Toshihiro Furukawa (Tokyo University of Science)
- 5AM1-1-3 Spoken Document Retrieval Using Combinational Use of Distances of Multiple Vector Spaces and Query Expansion with Optimized Weight Parameters** 9
Satoru Tsuge (Daido University), Hiromasa Ohashi (Nagoya University), Norihide Kitaoka (Nagoya University), Kazuya Takeda (Nagoya University), Kenji Kita (The University of Tokushima)
- 5AM1-1-4 Musical Tone Reduction for Sound-quality Improvement by Weighted Iterative Spectral Subtraction in Real Noisy-environments** 13
Keisuke Horii (Ritsumeikan University), Takahiro Fukumori (Ritsumeikan University), Masato Nakayama (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University), Yoichi Yamashita (Ritsumeikan University)
- 5AM1-1-5 AWA Long-Term Recording Speech Corpus (AWA-LTR)** 17
Satoru Tsuge (Daido University), Shingo Kuroiwa (Chiba University)

5AM1-2: Intelligent Transport Systems

Date: March 5, 10:00–11:40
Room: Ballroom2
Chair: Kohei Ohno (Tokyo University of Science)

- 5AM1-2-1 A Basic Study for Quantification of Driving Behavior and Estimation of Driving Psychology** 21
Momoyo Ito (The University of Tokushima), Kazuhito Sato (Akita Prefectural University), Koichiro Mori (The University of Tokushima), Minoru Fukumi (The University of Tokushima)
- 5AM1-2-2 Indoor Driving Support System for Personal Mobility Vehicle Driving in the Public Facilities** 25
Makiko Ishikawa (Chiba Institute of Technology), Taro Fujikawa (Tokyo Denki University), Shuro Nakajima (Chiba Institute

of Technology)

5AM1-2-3 Recognition of Eye Motions Using EOG and Statistical Learning 29

Peng Zhang (The University of Tokushima), Yohei Takeuchi (The University of Tokushima), Momoyo Ito (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

5AM1-2-4 Development of Simple Simulator for Visible Light Communication Using LED and Camera 33

Takao Fukumoto (Kagawa National College of Technology), Shintaro Arai (Kagawa National College of Technology), Tomohiro Yendo (Nagaoka University of Technology), Takaya Yamazato (Nagoya University), Hiraku Okada (Nagoya University), Toshiaki Fujii (Nagoya University)

5AM1-2-5 A Study on Image Processing Based Road Crack Detection 37

H. Chinthaka N. Premachandra (Tokyo University of Science), H.Waruna H.Premachandra (Wayamba University of Sri Lanka), Chandana D.Parape (Kyoto University)

5AM1-3: Bifurcation and Chaos

Date: March 5, 10:00–11:40

Room: Ballroom3

Chair: Yoko Uwate (Tokushima University)

5AM1-3-1 Effect Analysis of the Periodic Border in a Buck-Boost Converter 41

Manabu Yamanaka (Oita University), Hiroyuki Asahara (Oita University), Kazuyuki Aihara (The University of Tokyo), Takuji Kousaka (Oita University)

5AM1-3-2 Development of FPGA Simulator for Bifurcation Analysis 45

Junya Tada (Kagawa University), Takahiro Yamaguchi (Kagawa University), Hiroyuki Kitajima (Kagawa University)

5AM1-3-3 Evaluation of Complexity in Optically-Coupled Semiconductor Lasers by using Time-Delay Signature and Frequency Bandwidth 49

Kazutaka Kanno (Saitama University), Atsushi Uchida (Saitama University)

5AM1-3-4 Calculation Method of Stability for Two-degree-of-freedom Vibro-impact Systems 53

Yusuke Tone (Oita University), Hiroyuki Asahara (Oita University), Kazuyuki Aihara (The University of Tokyo), Takuji Kousaka (Oita University)

5AM1-3-5 Bifurcation Analysis of a Chaotic Map with a Controller 57

Daisuke Ito (University of Tokushima), Tetsushi Ueta (University of Tokushima), Kazuyuki Aihara (The University of Tokyo)

5AM1-4: Optimization (1)

Date: March 5, 10:00–12:00

Room: Ballroom4

Chair: Takafumi Matsuura (Tokyo University of Science)

5AM1-4-1 A Neuron Selection Method for Parallel Exponential Chaotic Tabu Search Hardware in Quadratic Assignment Problems 61

Akihito Toyoda (Tokyo Denki University), Yoshihiko Horio (Tokyo Denki University), Kazuyuki Aihara (The University of

Tokyo)

| | | |
|--|---|-----|
| 5AM1-4-2 | A Study of A New Two-stages MPPT Method for The Photovoltaic System | 65 |
| Yusuke Ohtsuka (Nippon Institute of Technology), Takayuki Kimura (Nippon Institute of Technology) | | |
| 5AM1-4-3 | A Basic Study on Cooperative Behavior in Swarm Intelligence Inspired by Quantum Entanglement State | 69 |
| Ichiro Iimura (Prefectural University of Kumamoto), Kazuhiro Takeda (Kagoshima National Coll. of Tech.), Shigeru Nakayama (Kagoshima University) | | |
| 5AM1-4-4 | Independent-minded Firefly Algorithm | 73 |
| Haruna Matsushita (Kagawa University) | | |
| 5AM1-4-5 | Performance Analysis of Multi-armed Bandit Algorithm with Negative Autocorrelation | 77 |
| Tomohiro Kato (Tokyo University of Science), Hiroshi Kurita (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science) | | |
| 5AM1-4-6 | Extended Continuous-Time Image Reconstruction System for Binary and Continuous Tomography | 309 |
| Yusaku Yamaguchi (The University of Tokushima), Ken'ichi Fujimoto (The University of Tokushima), Tetsuya Yoshinaga (The University of Tokushima) | | |

5PM1-1: Speech Processing (2)

Date: March 5, 13:00–14:40

Room: Ballroom1

Chair: Masashi Unoki (JAIST)

| | | |
|--|---|----|
| 5PM1-1-1 | F_0 Contour Generation of Thai Speech using the Tone Nucleus Model | 81 |
| Oraphan Krityakien (The University of Tokyo), Keikichi Hirose (The University of Tokyo), Nobuaki Minematsu (The University of Tokyo) | | |
| 5PM1-1-2 | Design of Comfortable Masking Sound on Auditory Masking for the Dental Treatment Sound | 85 |
| Yuko Suhara (Ritsumeikan University), Daisuke Ikefuji (Ritsumeikan University), Masato Nakayama (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University) | | |
| 5PM1-1-3 | Study on the Lyapunov Exponents in the Fluctuation of Vocal-cords and the Synthesis of Human Voice | 89 |
| Takaaki Kondo (Meiji University), Tomohisa Okawa (Meiji University), Shun Kadoi (Meiji University), Kyohei Kamiyama (Meiji University), Daiki Yoshida (Meiji University), Atsushi Akaike (Meiji University), Yuji Kageyama (Meiji University), Naohiro Kawamura (Meiji University), Hiroyuki Kamata (Meiji University) | | |
| 5PM1-1-4 | A Singing Voices Synthesis System to Characterize Vocal Registers using ARX-LF Model | 93 |
| Hiroki Motoda (Japan Advanced Institute of Science and Technology), Masato Akagi (Japan Advanced Institute of Science and Technology) | | |
| 5PM1-1-5 | Eigenvoice-based Character Conversion for Arbitrary Speakers using Various Character Voices of a Skilled Voice Actor | 97 |
| Teeraphon Pongkittiphan (The University of Tokyo), Daisuke Saito (The University of Tokyo), Nobuaki Minematsu (The University of Tokyo), Keikichi Hirose (The University of Tokyo) | | |

5PM1-2: Coding (1)

Date: March 5, 13:00–14:40

Room: Ballroom2

Chair: Masaya Fujisawa (Tokyo University of Science)

5PM1-2-1 Security Analysis of Erasure Wiretap Channels Using The Polar Code 101

Shota Sekimoto (The University of Tokushima), Shun Watanabe (The University of Tokushima)

5PM1-2-2 The 32nd-order Differential Attack on 8 Rounds of MISTY2 without FL Functions 105

Yasutaka Igarashi (Kagoshima University), Ryutaro Sueyoshi (Kagoshima University), Takahiro Murai (Kagoshima University), Yosuke Hashiguchi (Kagoshima University), Yutaka Eguchi (Kagoshima University), Toshinobu Kaneko (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)Seiji Fukushima (Kagoshima University), Tomohiro Hachino (Kagoshima University)

5PM1-2-3 Complexity Reduction of the 32nd-order Differential Attack on 8 Rounds of MISTY2 without FL Functions 109

Yasutaka Igarashi (Kagoshima University), Yutaka Eguchi (Kagoshima University), Ryutaro Sueyoshi (Kagoshima University), Takahiro Murai (Kagoshima University), Yosuke Hashiguchi (Kagoshima University), Toshinobu Kaneko (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)Seiji Fukushima (Kagoshima University), Tomohiro Hachino (Kagoshima University)

5PM1-2-4 Study on the Improving Chaos Stream Cipher with a Map Generated by the Xorshift 113

Daiki Yoshida (Meiji University), Ariyoshi Nakayama (Meiji University), Hiroataka Watanabe (Meiji University), Taichi Sato (Meiji University), Syuhei Kuriyama (Meiji University), Kenta Tabata (Meiji University), Hiroyuki Kamata (Meiji University)

5PM1-2-5 Analysis on the Fingerprinting Capacity for Memoryless and Fair Collusion Attacks 117

Tomoya Narita (University of Electro-Communications), Hideki Yagi (University of Electro-Communications), Tsutomu Kawabata (University of Electro-Communications)

5PM1-3: Synchronization

Date: March 5, 13:00–14:40

Room: Ballroom3

Chair: Hiroyuki Kitajima (Kagawa University)

5PM1-3-1 Synchronization Induced by Common Noise in Electric Chaotic Oscillators 121

Tsubasa Kawai (Saitama University), Kantaro Fujiwara (Saitama University), Kenya Jin'no (Nippon Institute of Technology), Yoshihiko Horio (Tokyo Denki University), Tohru Ikeguchi (Saitama University)

5PM1-3-2 Time Synchronization Scheme based on Noise-Induced Synchronization using Environmental Sound 125

Yuki Honda (Tokyo University of Science), Hiroyuki Yasuda (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science), Hiroya Nakao (Tokyo Institute of Technology), Kazuyuki Aihara (The University of Tokyo)

5PM1-3-3 Synchronization Phenomena of Two Simple RC Chaotic Circuits Coupled by a Capacitor 129

Ayana Shimada (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University), Jingmin Xin (Xi'an Jiaotong University)

5PM1-3-4 Synchronization of Switching Phenomena in a Coupled Chaotic System with Inaba Circuit 133

Takuya Nishimoto (Shikoku University), Yasuteru Hosokawa (Shikoku University), Yoshifumi Nishio (Tokushima University)

5PM1-3-5 Synchronization Phenomena in Coupled van der Pol Oscillators with Nonlinearity Errors 137

Kentaro Kaishima (Tokushima University), Takahiro Nagai (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

5PM1-4: Optimization (2)

Date: March 5, 13:00–14:40

Room: Ballroom4

Chair: Takayuki Kimura (Nippon Institute of Technology)

5PM1-4-1 Heuristic Methods for the Bike Sharing System Routing Problem 141

Satomi Wada (Tokyo University of Science), Takafumi Matsuura (Tokyo University of Science), Kazumiti Numata (Tokyo University of Science)

5PM1-4-2 Database Optimization Technique for Ethical Pharmaceutical Searching System 145

Tomo Uchiyama (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Momoyo Ito (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

5PM1-4-3 Study on Modified Adiabatic Quantum Computation in Deutsch-Jozsa Problem 149

Shigeru Nakayama (Kagoshima University), Ichiro Iimura (Prefectural University of Kumamoto)

5PM1-4-4 Minimum Cut Solution based on Circuit Analysis 153

Masatoshi Sato (Sophia University), Mamoru Tanaka (Sophia University)

5PM1-4-5 Self-Adaptive Control of the Number of Crossed Genes in Evolutionary Many-Optimization and its Behavior 157

Hiroyuki Sato (The University of Electro-Communications), Carlos Coello (CINVESTAV-IPN), Hernán Aguirre (Shinshu University), Kiyoshi Tanaka (Shinshu University)

5PM2-1: Acoustic Signal Processing (1)

Date: March 5, 15:00–16:40

Room: Ballroom1

Chair: Masashi Unoki (JAIST)

5PM2-1-1 A Study on Individualization of Head-Related Transfer Function in the Median Plane 161

Hideki Hisatsune (Japan Advanced Institute of Science and Technology), Masato Akagi (Japan Advanced Institute of Science and Technology)

| | | |
|--|--|-----|
| 5PM2-1-2 | Musical Generation from Chaos with Ring Attractor by Csound | 165 |
| Saho Osano (Sophia University), Mamoru Tanaka (Sophia University), Masatoshi Sato (Sophia University) | | |
| 5PM2-1-3 | Evaluation of Reproducing High-realistic Acoustic Sound Field based on the Radiation Characteristics of Musical Accompaniment for Gion Festival | 169 |
| Naoki Yoshimoto (Ritsumeikan University), Takahiro Fukumori (Ritsumeikan University), Masato Nakayama (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University) | | |
| 5PM2-1-4 | Generation of Musical Tone Waveform by State Equation | 173 |
| Hiroshi Yamamoto (Sophia University), Mamoru Tanaka (Sophia University) | | |
| 5PM2-1-5 | Construction of a Sound Quality Indicating System Using EEG and GMDH Neural Network | 177 |
| Kiminobu Nishimura (Keio University), Yasue Mitsukura (Keio University), Yohei Tomita (Foster Electric Company, Limited), Akira Hara (Foster Electric Company, Limited) | | |

5PM2-2: Coding (2)

Date: March 5, 15:00–16:40

Room: Ballroom2

Chair: Yusuke Kozawa (Tokyo University of Science)

| | | |
|--|---|-----|
| 5PM2-2-1 | Rate-Compatible Punctured Low-Density Parity-Check Codes Consisting of Two Subgraphs | 181 |
| Gou Hosoya (Tokyo University of Science), Keishi Osada (Waseda University), Masayuki Goto (Waseda University) | | |
| 5PM2-2-2 | Linear Time ADMM Decoding for LDPC Codes over MIMO Channels | 185 |
| Manabu Kobayashi (Shonan Institute of Technology), Hiroshi Ninomiya (Shonan Institute of Technology), Toshiyasu Matsushima (Waseda University), Shigeichi Hirasawa (Waseda University) | | |
| 5PM2-2-3 | An Iterative Minimum Distance Search Decoding Algorithm for Reed-Solomon Codes | 189 |
| Yoshia Bandoh (The University of Tokushima), Hitoshi Tokushige (The University of Tokushima), Jun Asatani (Okayama University of Science) | | |
| 5PM2-2-4 | Improved Layered Index-less Indexed Flash Codes and their Performance | 193 |
| Makoto Kuribara (Tokyo University of Science), Masaya Fujisawa (Tokyo University of Science) | | |
| 5PM2-2-5 | The 16th-order Differential Attack on 12 Rounds of HyRAL with a 256-bit Key | 197 |
| Yasutaka Igarashi (Kagoshima University), Naoki Shibayama (Tokyo University of Science), Takahiro Murai (Kagoshima University), Yosuke Hashiguchi (Kagoshima University), Yutaka Eguchi (Kagoshima University), Ryutaro Sueyoshi (Kagoshima University), Toshinobu Kaneko (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science), Seiji Fukushima (Kagoshima University), Tomohiro Hachino (Kagoshima University) | | |

5PM2-3: Circuit Design (1)

Date: March 5, 15:00–16:40

Room: Ballroom3

Chair: Akira Ono (Kagawa National College of Technology)

| | | |
|---|---|-----|
| 5PM2-3-1 | Negative-Bias Driving Voltage for Class-E GaN HEMT Oscillator Using a Diode | 201 |
| Youhei Noguchi (Fukuoka University), Xiuqin Wei (Fukuoka University), Tomoharu Nagashima (Chiba University), Hiroo Sekiya (Chiba University), Tadashi Suetsugu (Fukuoka University) | | |
| 5PM2-3-2 | A Divided Optimization Algorithm for a Single Phase PWM Inverter | 205 |
| Kazuya Morita (Nippon Institute of Technology), Hiroaki Ujiie (Nippon Institute of Technology), Kenya Jin'no (Nippon Institute of Technology) | | |
| 5PM2-3-3 | An Arbiter Circuit utilizing Time to Digital Converter Scheme for the RG-DTM PUF | 209 |
| Takahiko Murayama (Ritsumeikan University), Mitsuru Shiozaki (Ritsumeikan University), Takeshi Fujino (Ritsumeikan University) | | |
| 5PM2-3-4 | Efficient Evaluation Method of Tamper Resistant AES Cryptographic Circuits | 213 |
| Hiroki Ito (Ritsumeikan University), Mitsuru Shiozaki (Ritsumeikan University), Takeshi Fujino (Ritsumeikan University) | | |
| 5PM2-3-5 | Electronic Circuit Design of a Block Continuous-Time Image Reconstruction System | 217 |
| Yoshiaki Akaishi (The University of Tokushima), Ken'ichi Fujimoto (The University of Tokushima), Tetsuya Yoshinaga (The University of Tokushima) | | |

5PM2-4: [Special Session] Communication Sciences

Date: March 5, 15:00–16:40

Room: Ballroom4

Organizer: Mikio Hasegawa (Tokyo University of Science)

Chair: Mikio Hasegawa (Tokyo University of Science)

| | | |
|--|---|-----|
| 5PM2-4-1 | Effective Routing Strategy by Chaotic Neurodynamics for Complex Networks | 221 |
| Takayuki Kimura (Nippon Institute of Technology), Tohru Ikeguchi (Saitama University) | | |
| 5PM2-4-2 | Performance Analysis of Error-Correcting Method Using Separation of Chaos for Noncoherent Chaos Communications | 225 |
| Shintaro Arai (Kagawa National College of Technology), Yoshifumi Nishio (Tokushima University), Takaya Yamazato (Nagoya University) | | |
| 5PM2-4-3 | Effectiveness of the Markov Codes with Negative Correlation in FD/S³ | 229 |
| Tomoaki Yorozuya (Tokyo Denki University), Hisashi Watanabe (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science), Yoshihiko Horio (Tokyo Denki University), Kazuyuki Aihara (The University of Tokyo) | | |
| 5PM2-4-4 | Performance Evaluation of Timing Synchronization by Frequency Domain Integration in TD/SSS | 233 |
| Hisashi Watanabe (Tokyo University of Science), Yoshimasa Narumiya (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science), Yoshihiko Horio (Tokyo Denki University), Kazuyuki Aihara (The University of Tokyo) | | |
| 5PM2-4-5 | Performance Evaluation of FD/S³ for Frequency Synchronization using Timing Division Integration | 237 |
| Yoshimasa Narumiya (Tokyo University of Science), Hisashi Watanabe (Tokyo University of Science), Tomoaki Yorozuya (Tokyo Denki University), Mikio Hasegawa (Tokyo University of Science), Yoshihiko Horio (Tokyo Denki University), Kazuyuki Aihara (The University of Tokyo) | | |

6AM1-1: Speech Processing (3)

Date: March 6, 9:00–10:20

Room: Ballroom1

Chair: Yohei Tomita (Foster Electric Company, Limited)

6AM1-1-1 Clipping Ratio Estimation for the Clipping Noise Suppression 241

Makoto Hayakawa (Ritsumeikan University), Takahiro Fukumori (Ritsumeikan University), Masato Nakayama (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University)

6AM1-1-2 A Novel Voice Activity Detection Algorithm using Long-Term Spectral Flatness Measure 245

Yanna Ma (Tokyo Institute of Technology), Akinori Nishihara (Tokyo Institute of Technology)

6AM1-1-3 Study on Estimation Method of MTF/STI Using Generalized Model of Room Impulse Response 249

Kyohei Sasaki (Japan Advanced Institute of Science and Technology), Masashi Unoki (Japan Advanced Institute of Science and Technology)

6AM1-1-4 Extracting the Fundamental Frequency of Steady-state Portions of Traditional Japanese Singing *Shigin* 253

Masashi Nakayama (Kagawa National College of Technology), Kosuke Kato (Osaka University), Masaru Matsunaga (Kagawa National College of Technology)

6AM1-2: Computer Vision (1)

Date: March 6, 9:00–10:20

Room: Ballroom2

Chair: Tsuyoshi Otake (Tamagawa University)

6AM1-2-1 Detection of Abandoned Objects Based on Spatiotemporal Features from Public Stationary Camera 257

Takashi Hamano (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Momoyo Ito (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

6AM1-2-2 Abandoned Object Detection by Genetic Algorithm with Local Search 261

Takako Ikuno (The University of Tokushima), Yohei Takeuchi (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Momoyo Ito (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

6AM1-2-3 Model-based Hybrid Visual Tracking Corresponding to View Changing using 6-DOF Sensor 265

Taiki Fuji (Tokyo Univ. of Agri. & Tech., Keio Univ.), Toshio Moriya (Hitachi, Ltd.), Yasue Mitsukura (Keio University)

6AM1-2-4 Tracking Faces Involving Various Resolution Changes 269

Satoru Suzuki (Kagawa University), Yasue Mitsukura (Keio University), Satoru Takahashi (Kagawa University)

6AM1-3: Adaptive Systems and Control (1)

Date: March 6, 9:00–10:20

Room: Ballroom3

Chair: Masatoshi Sato (Sophia University)

- 6AM1-3-1 Development of Teleoperation System Using Internal Sensor Data for Three-Parallel-Crawler-Type Mobile Robot** 273
Masaki Shindoh (The University of Tokushima), Takashi Yasuno (The University of Tokushima), Akinobu Kuwahara (The University of Tokushima)
- 6AM1-3-2 A Tracking Control Method and Detection for the Surface of Road by Using a Pan-Tilt Unit on an Inverted Pendulum Mobile Robot** 277
Takayuki Matsuda (Konan University), Naoki Hatakeyama (Konan University), Masahiro Wada (Konan University), Masahiro Tanaka (Konan University), Tomohiro Umetani (Konan University), Minoru Ito (Maizuru National College of Technology)
- 6AM1-3-3 Neural Network Approach to A Renewable Energy System with Complex Networks** 281
Keisuke Kimura (Nippon Institute of Technology), Takayuki Kimura (Nippon Institute of Technology)
- 6AM1-3-4 Maximum Power Control for Wind Power Generation With Predicted Wind Speed** 285
Takahiro Kitajima (The University of Tokushima), Takashi Yasuno (The University of Tokushima)

6AM1-4: Optimization (3)

Date: March 6, 9:00–10:20

Room: Ballroom4

Chair: Tomohiro Kato (Tokyo University of Science)

- 6AM1-4-1 Consideration of Genetic Algorithm with Virus Infection solving Traveling Salesman Problem** 289
Takuya Inoue (Tokushima University), Yudai Shirasaki (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)
- 6AM1-4-2 Improvement of Set-Based Particle Swarm Optimization for Traveling Salesman Problem** 293
Tao Liu (Fukuoka Institute of Technology), Michiharu Maeda (Fukuoka Institute of Technology)
- 6AM1-4-3 Solution Search Performance of PSO using Gradient of an Evaluation Value** 297
Takuya Shindo (Nippon institute of Technology), Kenya Jin'no (Nippon institute of Technology)
- 6AM1-4-4 A Flexible Hardware/Software Co-Design for Particle Swarm Optimization** 301
Kui-Ting Chen (Waseda University), Xiao Wu (Waseda University), Molin Jia (Waseda University), Takaaki Baba (Waseda University)

6AM2-1: Image Processing (1)

Date: March 6, 10:40–12:00

Room: Ballroom1

Chair: Kazuhiro Hotta (Meijo University)

6AM2-1-1 Adaptive Multi-directional Morphological Wavelet Transform and It's Compression Efficiency 305

Yuri Tanito (Ritsumeikan University), Tatsuki Tokunaga (Ritsumeikan University), Masayoshi Nawata (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Tomohiro Fujita (Ritsumeikan University), Takeshi Ogura (Ritsumeikan University)

6AM2-1-3 Face Recognition Approach Based on Hyhrid Algorithm 313

Wei Wang (Tokushima University), Stephen Karungaru (Tokushima University), Akinori Tsuji (Tokushima University), Kenji Terada (Tokushima University)

6AM2-1-4 Fast and Accurate Image Plane Tracking Using 2D and 3D-Based Alignment 317

Koichi Takahashi (Keio University), Yasue Mitsukura (Keio University)

6AM2-2: Communications (1)

Date: March 6, 10:40–12:00

Room: Ballroom2

Chair: Akira Nakamura (Tokyo University of Science)

6AM2-2-1 Convolutional Coded Optical CDMA using Code Shift Keying 321

Shusaku Hata (Tokyo University of Science), Gou Hosoya (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)

6AM2-2-2 Performance Analysis of OCDMA with the Bursty Effects of Multiple User Interference 325

Hirofumi Terao (Tokyo University of Science), Gou Hosoya (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)

6AM2-2-3 P2P Streaming Method with Bandwidth Adjustment cosidering Playback Deadline 329

Masaki Hanada (Tokyo University of Information Sciences), Hidehiro Kanemitsu (Waseda University), Eiji Nunohiro (Tokyo University of Information Sciences)

6AM2-2-4 Image Transmission by Cellular Neural Network Using Sigma Delta Modulation 333

Shintaro Maezawa (Sophia University), Mamoru Tanaka (Sophia University)

6AM2-3: Modeling, Estimation and Prediction (1)

Date: March 6, 10:40–12:00

Room: Ballroom3

Chair: Ken'ichi Fujimoto (The University of Tokushima)

6AM2-3-1 A Resource Allocation for Utilizing Computational Resources in a Multicore Distributed System 337

Hidehiro Kanemitsu (Waseda University), Masaki Hanada (Tokyo University of Information Sciences)

6AM2-3-2 A Method for Detecting Signs of Train Sickness on Tilting Train 341

Takashi Fujishima (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Momoyo Ito (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

6AM2-3-3 Accurate and Low Computational Audio-to-score Alignment using Segmental CRF with an Explicit Continuous Tempo Model 345

Ryuichi Yamamoto (Nagoya Institute of Technology), Shinji Sako (Nagoya Institute of Technology), Tadashi Kitamura (Nagoya Institute of Technology)

6AM2-3-4 Nonlinear Technical Analysis Using Spatial Historical Data 349

Yushi Okura (Ibaraki University), Tomoya Suzuki (Ibaraki University)

6AM2-4: Nonlinear Systems and Networks

Date: March 6, 10:40–12:00

Room: Ballroom4

Chair: Takuji Kousaka (Oita University)

6AM2-4-1 Path Searching for Resistive Network Having Shifting Obstacles by Current Comparison Method 353

Takayuki Yamakawa (Sophia University), Masatoshi Sato (Sophia University), Mamoru Tanaka (Sophia University)

6AM2-4-2 Clustering Patterns Depending on Density of Chaotic Circuits in Networks 357

Yuji Takamaru (Tokushima University), Yoko Uwate (Tokushima University), Thomas Ott (Zurich University of Applied Sciences), Yoshifumi Nishio (Tokushima University)

6AM2-4-3 Numerical Validation for Blurred Basin of Symmetric Equilibria in a 3D Autonomous System 361

Jumpei Inaba (University of Tokushima), Yusuke Nishiuchi (Kochi National College of Technology), Tetsushi Ueta (University of Tokushima)

6AM2-4-4 Information Propagation for Optimal Resource Allocation 365

Satsuki Koyanagi (Waseda University), Hidehiro Kanemitsu (Waseda University), Hidenori Nakazato (Waseda University), Toshitaka Tsuda (Waseda University)

6PM1-1: Image Processing (2)

Date: March 6, 13:20–15:00

Room: Ballroom1

Chair: Momoyo Ito (The University of Tokushima)

6PM1-1-1 Image Labeling with Conditional Random Fields using Mean Field Approximation 369

Sadaaki Yamazaki (The University of Electro-Communications), Haruhisa Takahashi (The University of Electro-Communications)

6PM1-1-2 Highlight Generation Technique for Baseball Games Based on Information Entropies 373

Taishi Sadamoto (Kobe University), Mitsuteru Kataoka (Panasonic Corporation), Nobutaka Kuroki (Kobe University), Tetsuya Hirose (Kobe University), Masahiro Numa (Kobe University)

6PM1-1-3 Use of Morphological Pattern Spectrum to Detect Objects and Protect Privacy 377

Yuma Murakami (Ritsumeikan University), Toshiya Honda (Ritsumeikan University), Yuki Yanagihara (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Takeshi Ogura (Ritsumeikan University), Takeshi Fujino (Ritsumeikan University)

6PM1-1-4 Image Categorization using HDP with KPCA for Feature Transformation 381

Akihiro Yamamoto (University of Electro-Communications), Haruhisa Takahashi (University of Electro-Communications)

6PM1-2: [Special Session] Recent Advances in Communications, Networks, and Its Application Software

Date: March 6, 13:20–15:00

Room: Ballroom2

Organizer: Takahiko Saba (Chiba Institute of Technology)

Chair: Takahiko Saba (Chiba Institute of Technology)

6PM1-2-1 Linear Precoding for Channel Orthogonalization with Reduced Restrictions on Antenna Assignment in Multiuser MIMO-OFDM 385

Kei Kaihou (Chiba Institute of Technology), Takahiko Saba (Chiba Institute of Technology)

6PM1-2-2 Consideration of Scalability for Location Based Routing Protocol Using Mobile Agent in Wireless Multihop Networks 389

Kenta Tanaka (Kanagawa Institute of Technology), Shigeki Shiokawa (Kanagawa Institute of Technology)

6PM1-2-3 Delay Analysis for IEEE802.11 String Topology Multi-hop Networks 393

Jin Shi (Chiba University), Hiroo Sekiya (Chiba University), Kosuke Sanada (Chiba University), Nobuyoshi Komuro (Chiba University), Shiro Sakata (Chiba University)

6PM1-2-4 Dynamic QoE-Adaptive Live Streaming with Clustering Clients 397

Naoki Satake (Sophia University), Masaki Bandai (Sophia University)

6PM1-2-5 Serendipitous Mobile Recommender System with Street Pass Communications 401

Yasuyuki Horii (Sophia University), Masaki Bandai (Sophia University)

6PM1-3: Adaptive Systems and Control (2)

Date: March 6, 13:20–15:00

Room: Ballroom3

Chair: Shintaro Arai (Kagawa National College of Technology)

- 6PM1-3-1 A Novel Robust Adaptive System Identification Algorithm for Long Impulse Systems using Laguerre Filter** 405
Yo Hashimoto (Tokyo University of Science), Tomohiro Takahashi (Tokyo University of Science), Toshihiro Furukawa (Tokyo University of Science)
- 6PM1-3-2 Training Recurrent Neural Network For Nonlinear Adaptive Channel Equalization with Differential Evolution** 409
Sumeth Yuenyong (Tokyo Institute of Technology), Akinori Nishihara (Tokyo Institute of Technology)
- 6PM1-3-3 Assistive Torque Control for Power Assist Knee Orthosis at Sit to Stand and Stand to Sit Motion** 412
Masaki Abe (The University of Tokushima), Takashi Yasuno (The University of Tokushima), Akinobu Kuwahara (The University of Tokushima)
- 6PM1-3-4 Adaptive Walking Control Method of Quadruped Robot Using Complex-valued CPG Network with ZMP Feedback** 416
Yoshio Soneda (The University of Tokushima), Takashi Yasuno (The University of Tokushima)
- 6PM1-3-5 A Nonlinear Blind Source Separation System using Particle Swarm Optimization Algorithm** 420
Takuya Kurihara (Nippon Institute of Technology), Kenya Jin'no (Nippon Institute of Technology)

6PM1-4: Biological Systems and Networks (1)

Date: March 6, 13:20–15:00

Room: Ballroom4

Chair: Kaori Kuroda (Saitama University)

- 6PM1-4-1 Estimation of Biological Signal Features Indicating Riding Comfort Changes by Trail Variation** 424
Yasuki Muto (Keio University), Taiki Fuji (Keio University), Yasue Mitsukura (Keio University)
- 6PM1-4-2 Research of Cellular Neural Networks Inspired by Actual Friendship** 428
Yoshihiro Kato (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)
- 6PM1-4-3 Analysis of Visual Evoked Potentials Modulated by Periodic Pseudo-Random Sequences** 432
Masaki Nakanishi (Keio University), Yasue Mitsukura (Keio University)
- 6PM1-4-4 Avoidance Behavior of Glass Catfish to Weak Sinusoidal Electric Stimuli** 436
Hiroyuki Yoshimoto (Kyushu Institute of Technology), Masaya Hiruta (Kyushu Institute of Technology), Katsumi Tateno (Kyushu Institute of Technology)
- 6PM1-4-5 Investigation of Glia-Neuron Network with Group Learning of Hidden-Layer Neurons** 440
Chihiro Ikuta (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University), Guoan Yang (Xi'an Jiaotong University)

6PM2-1: Image Processing (3)

Date: March 6, 15:20–16:40

Room: Ballroom1

Chair: Takeshi Kumaki (Ritsumeikan University)

6PM2-1-1 **Fast Motion Estimation for Spatial Scalability of H.264/SVC** 444

Yuto Nagao (Tokushima University), Naozumi Ogawa (Tokushima University), Naoyuki Ishikura (Tokushima University), Tian Song (Tokushima University), Takashi Shimamoto (Tokushima University)

6PM2-1-2 **Investigation of Motion Picture Processing by Two-Layer Cellular Neural Networks Switching Coupling Templates** 448

Kazushige Natsuno (Tokushima University), Yoshihiro Kato (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

6PM2-1-3 **The Image Matching using Inhibitory Connected Pulse Coupled Neural Network** 452

Yuta Ishida (Tokyo University of Technology), Hiroaki Kurokawa (Tokyo University of Technology)

6PM2-1-4 **Image Resolution Enhancement using Cycle Spinning Cellular Neural Network** 456

Kei Chiba (Tamagawa University), Tsuyoshi Otake (Tamagawa University), Hisashi Aomori (Chukyo University), Nobuaki Takahashi (IBM Japan, Ltd.), Mamoru Tanaka (Sophia University)

6PM2-2: Communications (2)

Date: March 6, 15:20–16:40

Room: Ballroom2

Chair: Gou Hosoya (Tokyo University of Science)

6PM2-2-1 **Control Channel Selection for Expanding White Space Length using Channel Statistic Information with Observation Error** 460

Mai Ohta (The University of Electro-Communications), Takeo Fujii (The University of Electro-Communications)

6PM2-2-2 **Cross-Layer Designed QoS Policy Management Framework for Wireless Heterogeneous Network** 464

Shintaro Mori (Kagawa University), Koji Ishii (Kagawa University), Shigeaki Ogose (Kagawa University)

6PM2-2-3 **Effectiveness of the Network Coding with Frame Slotted ALOHA on VANET** 468

Hiroyuki Higano (Ibaraki University), Hiromasa Habuchi (Ibaraki University), Yusuke Kozawa (Tokyo University of Science)

6PM2-2-4 **Performance Evaluation of RSSI-Based Rate Adaptation Scheme in Real Wireless Environment** 472

Tatsuro Abe (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science)

6PM2-3: Circuit Design (2)

Date: March 6, 15:20–16:40

Room: Ballroom3

Chair: Hiroo Sekiya (Chiba University)

6PM2-3-1 **Electrical Test Method of Resistive Open Leads in QFP ICs** 476

Akira Ono (Kagawa National College of Technology), Hiroyuki Yotsuyanagi (Tokushima University), Masao Takagi (Kagawa National College of Technology), Masaki Hashizume (Tokushima University)

6PM2-3-2 **The Hardware Cost Reduction Method of Control Circuit for Link-Sharing Method of Buffer in NoC Router** 480

Naohisa Fukase (Shonan Institute of Technology), Yasuyuki Miura (Shonan Institute of Technology), Shigeyoshi Watanabe (Shonan Institute of Technology)

6PM2-3-3 **Macromodeling and Circuit Simulation of High-Speed Interconnects Based on Vector Fitting and Equivalent Circuit Synthesis** 484

Daisuke Honda (Shizuoka University), Tadatoshi Sekine (Shizuoka University), Hideki Asai (Shizuoka University)

6PM2-3-4 **FPGA Implementation of Programmable CORDIC for Accelerating Soft-Core Processor** 488

Xiao Wu (Waseda University), Kui-Ting Chen (Waseda University), Molin Jia (Waseda University), Takaaki Baba (Waseda University)

6PM2-4: Biological Systems and Networks (2)

Date: March 6, 15:20–16:40

Room: Ballroom4

Chair: Katsumi Tateno (Kyushu Institute of Technology)

6PM2-4-1 **EEG Analysis Using Smartphone** 492

Mikito Ogino (Keio University), Yasue Mitsukura (Keio University)

6PM2-4-2 **Experimental Study of Behavior on Non-Uniform Environment Based on Embodiment of Virtual Agent** 496

Osamu Hanagata (Kanazawa Institute of Technology)

6PM2-4-3 **Smoothness and Non-Smoothness Control based on Template Width of Cellular Neural Network with Pulse Density Neurons** 500

Aya Takahashi (Sophia University), Mamoru Tanaka (Sophia University)

6PM2-4-4 **Estimation of Neural Network Structures and Direction of Couplings using Spike Time Metric** 504

Kaori Kuroda (Saitama University), Kantaro Fujiwara (Saitama University), Tohru Ikeguchi (Saitama University)

7AM1-1: Image Processing (4)

Date: March 7, 9:00–10:20

Room: Ballroom1

Chair: Hiroaki Kurokawa (Tokyo University of Technology)

7AM1-1-1 Development of Low-power Camera Sensor Node using Infrared Array Sensor and CMOS Image Sensor 508

Toshiya Honda (Ritsumeikan University), Kazuho Nakagawa (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Masafumi Kimata (Ritsumeikan University), Takeshi Fujino (Ritsumeikan University)

7AM1-1-2 Epibiosis Vein Imaging through Near-Infrared Ray during Temperature Stimuli 512

Keisuke Takahashi (The University of Tokushima), Minoru Fukumi (The University of Tokushima), Koji Kashihara (The University of Tokushima)

7AM1-1-3 FPGA Implementation of Single-Image Super Resolution based on Frame-Bufferless Box Filtering 516

Yuki Sanada (Hokkaido University), Takanori Ohira (Hokkaido University), Satoshi Chikuda (Hokkaido University), Masaki Igarashi (Hokkaido University), Masayuki Ikebe (Hokkaido University), Tetsuya Asai (Hokkaido University), Masato Motomura (Hokkaido University)

7AM1-1-4 Image Enhancement using High Frequency Subband Interpolation 520

Takuya Monobe (Tamagawa University), Tsuyoshi Otake (Tamagawa University), Hisashi Aomori (Chukyo University), Nobuaki Takahashi (IBM Japan, Ltd.), Mamoru Tanaka (Sophia University)

7AM1-2: Acoustic Signal Processing (2)

Date: March 7, 9:00–10:20

Room: Ballroom2

Chair: Yasutaka Igarashi (Kagoshima University)

7AM1-2-1 Sound Source Localization based on Blind Impulse Response Estimation under Heavy-reverberant Environments 524

Yasuhiro Kuratani (Ritsumeikan University), Kohei Hayashida (Ritsumeikan University), Masato Nakayama (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University)

7AM1-2-2 Monaural Blind Source Separation based on Frequency Spectrum Peak Shift and Power Fluctuation 528

Terumi Umematsu (Waseda University), Guillermo Enriquez (Waseda University), Tomomi Matsumoto (Waseda University), Mitsuharu Matsumoto (The University of Electro-Communications), Shuji Hashimoto (Waseda University)

7AM1-2-3 Auditory Distance Perception with Combination of Parametric and Dynamic Loudspeakers 532

Daisuke Ikefuji (Ritsumeikan University), Sota Kurimoto (Ritsumeikan University), Masato Nakayama (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University)

7AM1-2-4 Sound Creation Based on Ring Attractor 536

Naruno Fujii (Sophia University), Mamoru Tanaka (Sophia University)

7AM1-3: Learning

Date: March 7, 9:00–10:20

Room: Ballroom3

Chair: Taiki Fujii (Tokyo University of Agriculture and Technology, Keio University)

7AM1-3-1 Improving Semi-Supervised Learning for Big Image Collections 540

Masaaki Sugiyama (The University of Electro-Communications), Haruhisa Takahashi (The University of Electro-Communications)

7AM1-3-2 A Proposal of Adaptive Metric Learning to Each Category Characteristics for Text Classification 544

Kenta Mikawa (Waseda University), Takashi Ishida (Waseda University), Masayuki Goto (Waseda University), Shigeichi Hirasawa (Waseda University)

7AM1-3-3 Visualizing the Internal Representation of a Hierarchical Neural Network 548

Pitoyo Hartono (Chukyo University)

7AM1-3-4 Copying Weight Parameters in Back Propagation 552

Naohiro Shibuya (Tokushima University), Yuta Yokoyama (Tokushima University), Tomoya Shima (Tokushima University), Chihiro Ikuta (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

7AM1-4: Biological Systems and Networks (3)

Date: March 7, 9:00–10:20

Room: Ballroom4

Chair: Haruna Matsushita (Kagawa University)

7AM1-4-1 Investigation of Associative Memory by Small World Hopfield Neural Network with Characteristics of Social Network 556

Tomoya Shima (Tokushima University), Chihiro Ikuta (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

7AM1-4-2 Analysis on Effectiveness of Negative-Autocorrelation Searching Dynamics Using Associative Memory Neural Networks 560

Ryota Nakamura (Tokyo University of Science), Tomohiro Kato (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science)

7AM1-4-3 A Method for Nanoscale and Molecular Networking exchange Transfer System 564

Tomonobu Sato (Hitachi,Ltd)

7AM1-4-4 Tone Separation by Using EEG 568

Kei Takayama (Keio University), Yasue Mitsukura (Keio University)

7AM2-1: Computer Vision (2)

Date: March 7, 10:40–12:00

Room: Ballroom1

Chair: Koichi Takahashi (Keio University)

7AM2-1-1 Cell Nucleus Detection with Evolutionary Method for a Single Image 572

Junya Sato (Iwate University), Takuya Akashi (Iwate University)

7AM2-1-2 Asbestos Counting in Building Materials by Integrating Various Kinds of Classifiers 576

Kenji Chigusa (Meijo University), Kazuhiro Hotta (Meijo University)

7AM2-1-3 Human Action Recognition with Two-Level SVMs 580

Manabu Yoshida (University of Electro-Communications), Haruhisa Takahashi (University of Electro-Communications)

7AM2-1-4 Analyzing Tone Mapping form Based on Retinex and Local Histogram Equalization 584

Naoto Kato (Hokkaido University), Masayuki Ikebe (Hokkaido University), Masaki Igarashi (Hokkaido University), Akira Mizuno (Hokkaido University)

7AM2-2: Communications (3)

Date: March 7, 10:40–12:00

Room: Ballroom2

Chair: Takeo Fujii (The University of Electro-Communications)

7AM2-2-1 A Study on ICI Cancellation of OFDMA Uplink Transmission under Multi-path Channel 588

Akira Nakamura (Tokyo University of Science), Kohei Ohno (Tokyo University of Science), Makoto Itami (Tokyo University of Science)

7AM2-2-2 Inter-Block Interference Removing Based on Oblique Projection for Single Carrier Block Transmission System without CP 592

Norisato Suga (Tokyo University of Science), Takaaki Hirano (Tokyo University of Science), Tomomi Ogawa (Tokyo University of Science), Toshihiro Furukawa (Tokyo University of Science)

7AM2-2-3 A Study of Collision Avoidance for Multicast on Wireless LAN 596

Toshiyuki Ogawa (Nippon Institute of Technology), Takefumi Hiraguri (Nippon Institute of Technology), Kenya Jin'no (Nippon Institute of Technology)

7AM2-2-4 MMSE-FDE-STBC with Channel Frequency Response and Noise Variance Estimation for Cooperative Relay Networks 600

Ryuta Sasaki (Tokyo University of Science), Gou Hosoya (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)

7AM2-3: Modeling, Estimation and Prediction (2)

Date: March 7, 10:40–12:00

Room: Ballroom3

Chair: Masahiro Wada (Konan University)

- 7AM2-3-1 Analysis of Relationship between Intention and Behavior Using EEG-EMG Coherence during Isotonic Exercise** 604
Suguru Kanouga (Keio University), Yasue Mitsukura (Keio University)
- 7AM2-3-2 A Study on Evolutionary Multi-Objective Racing Car Design Optimization using Parallel MOEA/D** 608
Hiroyuki Sato (The University of Electro-Communications), Minori Imajima (The University of Electro-Communications), Minami Miyakawa (The University of Electro-Communications)
- 7AM2-3-3 Model-Based Object Pose Estimation Using Evolutionary Method – The Evaluation of Blurring and Template Size –** 612
Maiko Kagaya (Iwate University), Takuya Akashi (Iwate University)
- 7AM2-3-4 An Eye Blink Artifact Reduction Method for Single-Channel EEG Devices** 616
Keisuke Tawada (Keio University), Yasue Mitsukura (Keio University)

7AM2-4: Nonlinear Circuits (1)

Date: March 7, 10:40–12:00

Room: Ballroom4

Chair: Xiuqin Wei (Fukuoka University)

- 7AM2-4-1 An Improved Fully-Differential A/D Converter Circuit Based on the Negative β -Map** 620
Mitsuhiro Nakamura (Tokyo Denki University), Yoshihiko Horio (Tokyo Denki University), Tohru Kohda (Kyushu University), Kazuyuki Aihara (The University of Tokyo)
- 7AM2-4-2 A Flexible Adaptive Matching Cell Circuit with Bell-Shaped Similarity Evaluation Function for High-Speed Low-Power Nonlinear Pattern Recognition Systems** 624
Yijie Xiong (Tohoku University), Yitao Ma (Tohoku University), Tetsuo Endoh (Tohoku University)
- 7AM2-4-3 Detailed Investigation of Synchronizations in Three Cross-Coupled Chaotic Circuits** 628
Naoto Kageyama (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)
- 7AM2-4-4 Investigation of Oscillatory Networks Including Two Types of Resistors** 632
Takahiro Nagai (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

7PM1-2: Sensor Networks

Date: March 7, 13:20–15:00

Room: Ballroom2

Chair: Masaki Bandai (Sophia University)

7PM1-2-1 Residual Energy and Distance-aware Clustering Protocol in Wireless Sensor Networks 636

Koichi Tabata (Tokyo University of Science), Gou Hosoya (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)

7PM1-2-2 An Analysis on Noise-Induced Synchronization by Natural Environmental Signals 640

Hiroyuki Yasuda (Tokyo University of Science), Makoto Harashima (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science), Hiroya Nakao (Tokyo Institute of Technology)

7PM1-2-3 Low Power Sensor System Using Smart Analog under Normally Off Operation 644

Ryohei Hori (Ritsumeikan University), Kazuho Nakagawa (Ritsumeikan University), Toshiya Honda (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Takeshi Fujino (Ritsumeikan University)

7PM1-2-4 Bitmap Index based Reliable Data Transmission for Wireless Sensor Network 648

Shouyi Yin (Tsinghua University), Renyan Zhou (Tsinghua University), Leibo Liu (Tsinghua University), Shaojun Wei (Tsinghua University)

7PM1-3: Modeling, Estimation and Prediction (3)

Date: March 7, 13:20–15:00

Room: Ballroom3

Chair: Kenya Jin'no (Nippon Institute of Technology)

7PM1-3-1 A Low Power Multimedia Processor Implementing Block Motion Estimation Algorithm Having Capability of Adaptively Predicting both Optimum Clock Frequency and Optimum Supply Voltage 653

Nobuaki Kobayashi (Chuo University), Tadayoshi Enomoto (Chuo University)

7PM1-3-2 Depth Estimation with SVR and CRF 657

Kouhei Egami (University of Electro-Communications), Haruhisa Takahashi (University of Electro-Communications)

7PM1-3-3 Tradeoff between Rebalancing Cost and Prediction Accuracy of the Nonlinear Portfolio Model 661

Satoshi Inose (Ibaraki University), Tomoya Suzuki (Ibaraki University), Kazuo Yamanaka (Ibaraki University)

7PM1-3-4 Evaluation of Traffic Control Rules Based on Human's Decision-Making Data for Panel Cruising Problem 665

Daisuke Irahara (The University of Tokushima), Takashi Yasuno (The University of Tokushima)

7PM1-3-5 Modified Bollinger Bands Based on Nonlinear Theory for Arbitrage Trading Strategies 669

Yusaku Hirano (Ibaraki University), Taiga Hayashi (Ibaraki University), Tomoya Suzuki (Ibaraki University)

7PM1-4: Nonlinear Circuits (2)

Date: March 7, 13:20–15:00

Room: Ballroom4

Chair: Yasuteru Hosokawa (Shikoku University)

7PM1-4-1 **Evaluation and Comparison of Controlling Energy** 673

Tomohiro Otsu (Tokushima University), Ken'ichi Fujimoto (Tokushima University), Daisuke Ito (Tokushima University), Tetsushi Ueta (Tokushima University)

7PM1-4-2 **A Compact Dynamic Logic Element with Chaotic State Transitions** 677

Kousuke Yamauchi (Tokyo Denki University), Yoshihiko Horio (Tokyo Denki University), Kazuyuki Aihara (The University of Tokyo)

7PM1-4-3 **Synchronization of an Array of Chaotic Circuits Coupled by Different Coupling Strength** 681

Koji Okamoto (Tokushima University), Yuji Takamaru (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

7PM1-4-4 **Path Search based on The Current Comparison for Circuit with Negative Resistance** 685

Masahiro Hirakawa (Sophia University), Mamoru Tanaka (Sophia University)

Author Index

A

Abe, Masaki: 412(6PM1-3-3)
Abe, Tatsuro: 472(6PM2-2-4)
Aguirre, Hernán: 157(5PM1-4-5)
Aihara, Kazuyuki: 41(5AM1-3-1) , 53(5AM1-3-4)
 , 57(5AM1-3-5) , 61(5AM1-4-1)
 , 125(5PM1-3-2) , 229(5PM2-4-3)
 , 233(5PM2-4-4) , 237(5PM2-4-5) ,
 620(7AM2-4-1) , 677(7PM1-4-2)
Akagi, Masato: 93(5PM1-1-4) , 161(5PM2-1-1)
Akaike, Atsushi: 89(5PM1-1-3)
Akaishi, Yoshiaki: 217(5PM2-3-5)
Akashi, Takuya: 572(7AM2-1-1) , 612(7AM2-3-3)
Aomori, Hisashi: 456(6PM2-1-4) , 520(7AM1-1-4)
Arai, Shintaro: 33(5AM1-2-4) , 225(5PM2-4-2)
Asahara, Hiroyuki: 41(5AM1-3-1) , 53(5AM1-3-4)
Asai, Hideki: 484(6PM2-3-3)
Asai, Tetsuya: 516(7AM1-1-3)
Asatani, Jun: 189(5PM2-2-3)

B

Baba, Takaaki: 301(6AM1-4-4) , 488(6PM2-3-4)
Bandai, Masaki: 397(6PM1-2-4) , 401(6PM1-2-5)
Bandoh, Yoshia: 189(5PM2-2-3)

C

Chen, Kui-Ting: 301(6AM1-4-4) , 488(6PM2-3-4)
Chiba, Kei: 456(6PM2-1-4)
Chigusa, Kenji: 576(7AM2-1-2)
Chikuda, Satoshi: 516(7AM1-1-3)
Chinthaka N.Premachandra, H.: 37(5AM1-2-5)
Coello, Carlos: 157(5PM1-4-5)

D

D.Parape, Chandana: 37(5AM1-2-5)
Duc Nguyen, Duy: 1(5AM1-1-1)

E

Egami, Kouhei: 657(7PM1-3-2)
Eguchi, Yutaka: 105(5PM1-2-2) , 109(5PM1-2-3) ,
 197(5PM2-2-5)
Endoh, Tetsuo: 624(7AM2-4-2)
Enomoto, Tadayoshi: 653(7PM1-3-1)
Enriquez, Guillermo: 528(7AM1-2-2)

F

Fuji, Taiki: 265(6AM1-2-3) , 424(6PM1-4-1)
Fujii, Naruno: 536(7AM1-2-4)
Fujii, Takeo: 460(6PM2-2-1)
Fujii, Toshiaki: 33(5AM1-2-4)
Fujikawa, Taro: 25(5AM1-2-2)
Fujimoto, Ken'ichi: 309(5AM1-4-6) , 217(5PM2-3-5) ,
 673(7PM1-4-1)
Fujino, Takeshi: 209(5PM2-3-3) , 213(5PM2-3-4)
 , 377(6PM1-1-3) , 508(7AM1-1-1) ,
 644(7PM1-2-3)
Fujisawa, Masaya: 193(5PM2-2-4)
Fujishima, Takashi: 341(6AM2-3-2)
Fujita, Tomohiro: 305(6AM2-1-1)
Fujiwara, Kantaro: 121(5PM1-3-1) , 504(6PM2-4-4)
Fukase, Naohisa: 480(6PM2-3-2)
Fukumi, Minoru: 21(5AM1-2-1) , 29(5AM1-2-3)
 , 145(5PM1-4-2) , 257(6AM1-2-1)
 , 261(6AM1-2-2) , 341(6AM2-3-2) ,
 512(7AM1-1-2)
Fukumori, Takahiro: 13(5AM1-1-4) , 169(5PM2-1-3) ,
 241(6AM1-1-1)
Fukumoto, Takao: 33(5AM1-2-4)
Fukushima, Seiji: 105(5PM1-2-2) , 109(5PM1-2-3) ,
 197(5PM2-2-5)
Furukawa, Toshihiro: 5(5AM1-1-2) , 405(6PM1-3-1) ,
 592(7AM2-2-2)

G

Goto, Masayuki: 181(5PM2-2-1) , 544(7AM1-3-2)

H

H.Premachandra, H.Waruna: 37(5AM1-2-5)
Habuchi, Hiromasa: 468(6PM2-2-3)
Hachino, Tomohiro: 105(5PM1-2-2) , 109(5PM1-2-3)
 , 197(5PM2-2-5)
Hamano, Takashi: 257(6AM1-2-1)
Hanada, Masaki: 329(6AM2-2-3) , 337(6AM2-3-1)
Hanagata, Osamu: 496(6PM2-4-2)
Hara, Akira: 177(5PM2-1-5)
Harashima, Makoto: 640(7PM1-2-2)
Hartono, Pitoyo: 548(7AM1-3-3)
Hasegawa, Mikio: 77(5AM1-4-5) , 125(5PM1-3-2)
 , 229(5PM2-4-3) , 233(5PM2-4-4)
 , 237(5PM2-4-5) , 325(6AM2-2-2)
 , 472(6PM2-2-4) , 560(7AM1-4-2) ,
 640(7PM1-2-2)

Hashiguchi, Yosuke: 105(5PM1-2-2) , 109(5PM1-2-3) , 197(5PM2-2-5)
 Hashimoto, Shuji: 528(7AM1-2-2)
 Hashimoto, Yo: 405(6PM1-3-1)
 Hashizume, Masaki: 476(6PM2-3-1)
 Hata, Shusaku: 321(6AM2-2-1)
 Hatakeyama, Naoki: 277(6AM1-3-2)
 Hayakawa, Makoto: 241(6AM1-1-1)
 Hayashi, Taiga: 669(7PM1-3-5)
 Hayashida, Kohei: 524(7AM1-2-1)
 Higano, Hiroyuki: 468(6PM2-2-3)
 Hiraguri, Takefumi: 596(7AM2-2-3)
 Hirakawa, Masahiro: 685(7PM1-4-4)
 Hirano, Takaaki: 592(7AM2-2-2)
 Hirano, Yusaku: 669(7PM1-3-5)
 Hirasawa, Shigeichi: 185(5PM2-2-2) , 544(7AM1-3-2)
 Hirose, Keikichi: 1(5AM1-1-1) , 81(5PM1-1-1) , 97(5PM1-1-5)
 Hirose, Tetsuya: 373(6PM1-1-2)
 Hiruta, Masaya: 436(6PM1-4-4)
 Hisatsune, Hideki: 161(5PM2-1-1)
 Honda, Daisuke: 484(6PM2-3-3)
 Honda, Toshiya: 377(6PM1-1-3) , 508(7AM1-1-1) , 644(7PM1-2-3)
 Honda, Yuki: 125(5PM1-3-2)
 Hori, Ryohei: 644(7PM1-2-3)
 Hori, Yasuyuki: 401(6PM1-2-5)
 Horii, Keisuke: 13(5AM1-1-4)
 Horio, Yoshihiko: 61(5AM1-4-1) , 121(5PM1-3-1) , 229(5PM2-4-3) , 233(5PM2-4-4) , 237(5PM2-4-5) , 620(7AM2-4-1) , 677(7PM1-4-2)
 Hosokawa, Yasuteru: 133(5PM1-3-4)
 Hosoya, Gou: 181(5PM2-2-1) , 321(6AM2-2-1) , 325(6AM2-2-2) , 600(7AM2-2-4) , 636(7PM1-2-1)
 Hotta, Kazuhiro: 576(7AM2-1-2)

I

Igarashi, Masaki: 516(7AM1-1-3) , 584(7AM2-1-4)
 Igarashi, Yasutaka: 105(5PM1-2-2) , 109(5PM1-2-3) , 197(5PM2-2-5)
 Imura, Ichiro: 69(5AM1-4-3) , 149(5PM1-4-3)
 Ikebe, Masayuki: 516(7AM1-1-3) , 584(7AM2-1-4)
 Ikefuji, Daisuke: 85(5PM1-1-2) , 532(7AM1-2-3)
 Ikeguchi, Tohru: 121(5PM1-3-1) , 221(5PM2-4-1) , 504(6PM2-4-4)
 Ikuno, Takako: 261(6AM1-2-2)
 Ikuta, Chihiro: 440(6PM1-4-5) , 552(7AM1-3-4) , 556(7AM1-4-1)
 Imajima, Minori: 608(7AM2-3-2)
 Inaba, Jumpei: 361(6AM2-4-3)
 Inose, Satoshi: 661(7PM1-3-3)
 Inoue, Takuya: 289(6AM1-4-1)
 Irahara, Daisuke: 665(7PM1-3-4)
 Ishida, Takashi: 544(7AM1-3-2)
 Ishida, Yuta: 452(6PM2-1-3)
 Ishii, Koji: 464(6PM2-2-2)
 Ishikawa, Makiko: 25(5AM1-2-2)

Ishikura, Naoyuki: 444(6PM2-1-1)
 Itami, Makoto: 588(7AM2-2-1)
 Ito, Daisuke: 57(5AM1-3-5) , 673(7PM1-4-1)
 Ito, Hiroki: 213(5PM2-3-4)
 Ito, Minoru: 277(6AM1-3-2)
 Ito, Momoyo: 21(5AM1-2-1) , 29(5AM1-2-3) , 145(5PM1-4-2) , 257(6AM1-2-1) , 261(6AM1-2-2) , 341(6AM2-3-2)
 Ito, Shin-ichi: 29(5AM1-2-3) , 145(5PM1-4-2) , 257(6AM1-2-1) , 261(6AM1-2-2) , 341(6AM2-3-2)

J

Jia, Molin: 301(6AM1-4-4) , 488(6PM2-3-4)
 Jin'no, Kenya: 121(5PM1-3-1) , 205(5PM2-3-2) , 297(6AM1-4-3) , 420(6PM1-3-5) , 596(7AM2-2-3)

K

Kadoi, Shun: 89(5PM1-1-3)
 Kagaya, Maiko: 612(7AM2-3-3)
 Kageyama, Naoto: 628(7AM2-4-3)
 Kageyama, Yuji: 89(5PM1-1-3)
 Kaihou, Kei: 385(6PM1-2-1)
 Kaishima, Kentaro: 137(5PM1-3-5)
 Kamata, Hiroyuki: 89(5PM1-1-3) , 113(5PM1-2-4)
 Kamiyama, Kyohei: 89(5PM1-1-3)
 Kaneko, Toshinobu: 105(5PM1-2-2) , 109(5PM1-2-3) , 197(5PM2-2-5)
 Kanemitsu, Hidehiro: 329(6AM2-2-3) , 337(6AM2-3-1) , 365(6AM2-4-4)
 Kanno, Kazutaka: 49(5AM1-3-3)
 Kanouga, Suguru: 604(7AM2-3-1)
 Karungaru, Stephen: 313(6AM2-1-3)
 Kashihara, Koji: 512(7AM1-1-2)
 Kataoka, Mitsuteru: 373(6PM1-1-2)
 Kato, Kosuke: 253(6AM1-1-4)
 Kato, Naoto: 584(7AM2-1-4)
 Kato, Tomohiro: 77(5AM1-4-5) , 560(7AM1-4-2)
 Kato, Yoshihiro: 428(6PM1-4-2) , 448(6PM2-1-2)
 Kawabata, Tsutomu: 117(5PM1-2-5)
 Kawai, Tsubasa: 121(5PM1-3-1)
 Kawamura, Naohiro: 89(5PM1-1-3)
 Kimata, Masafumi: 508(7AM1-1-1)
 Kimura, Keisuke: 281(6AM1-3-3)
 Kimura, Takayuki: 65(5AM1-4-2) , 221(5PM2-4-1) , 281(6AM1-3-3)
 Kita, Kenji: 9(5AM1-1-3)
 Kitajima, Hiroyuki: 45(5AM1-3-2)
 Kitajima, Takahiro: 285(6AM1-3-4)
 Kitamura, Tadashi: 345(6AM2-3-3)
 Kitaoka, Norihide: 9(5AM1-1-3)
 Kobayashi, Manabu: 185(5PM2-2-2)
 Kobayashi, Nobuaki: 653(7PM1-3-1)
 Kohda, Tohru: 620(7AM2-4-1)
 Komuro, Nobuyoshi: 393(6PM1-2-3)
 Kondo, Takaaki: 89(5PM1-1-3)
 Konishi, Katsumi: 5(5AM1-1-2)

Kousaka, Takuji: 41(5AM1-3-1) , 53(5AM1-3-4)
 Koyanagi, Satsuki: 365(6AM2-4-4)
 Kozawa, Yusuke: 468(6PM2-2-3)
 Krityakien, Oraphan: 81(5PM1-1-1)
 Kumaki, Takeshi: 305(6AM2-1-1) , 377(6PM1-1-3) ,
 508(7AM1-1-1) , 644(7PM1-2-3)
 Kuratani, Yasuhiro: 524(7AM1-2-1)
 Kuribara, Makoto: 193(5PM2-2-4)
 Kurihara, Takuya: 420(6PM1-3-5)
 Kurimoto, Sota: 532(7AM1-2-3)
 Kurita, Hiroshi: 77(5AM1-4-5)
 Kuriyama, Syuhei: 113(5PM1-2-4)
 Kuroda, Kaori: 504(6PM2-4-4)
 Kuroiwa, Shingo: 17(5AM1-1-5)
 Kurokawa, Hiroaki: 452(6PM2-1-3)
 Kuroki, Nobutaka: 373(6PM1-1-2)
 Kuwahara, Akinobu: 273(6AM1-3-1) , 412(6PM1-3-3)

L

Liu, Leibo: 648(7PM1-2-4)
 Liu, Tao: 293(6AM1-4-2)

M

Ma, Yanna: 245(6AM1-1-2)
 Ma, Yitao: 624(7AM2-4-2)
 Maeda, Michiharu: 293(6AM1-4-2)
 Maezawa, Shintaro: 333(6AM2-2-4)
 Matsuda, Takayuki: 277(6AM1-3-2)
 Matsumoto, Mitsuharu: 528(7AM1-2-2)
 Matsumoto, Tomomi: 528(7AM1-2-2)
 Matsunaga, Masaru: 253(6AM1-1-4)
 Matsushima, Toshiyasu: 185(5PM2-2-2)
 Matsushita, Haruna: 73(5AM1-4-4)
 Matsuura, Takafumi: 141(5PM1-4-1)
 Mikawa, Kenta: 544(7AM1-3-2)
 Minematsu, Nobuaki: 1(5AM1-1-1) , 81(5PM1-1-1) ,
 97(5PM1-1-5)
 Mitsukura, Yasue: 177(5PM2-1-5) , 265(6AM1-2-3)
 , 269(6AM1-2-4) , 317(6AM2-1-4)
 , 424(6PM1-4-1) , 432(6PM1-4-3)
 , 492(6PM2-4-1) , 568(7AM1-4-4) ,
 604(7AM2-3-1) , 616(7AM2-3-4)
 Miura, Yasuyuki: 480(6PM2-3-2)
 Miyakawa, Minami: 608(7AM2-3-2)
 Mizuno, Akira: 584(7AM2-1-4)
 Monobe, Takuya: 520(7AM1-1-4)
 Mori, Koichiro: 21(5AM1-2-1)
 Mori, Shintaro: 464(6PM2-2-2)
 Morita, Kazuya: 205(5PM2-3-2)
 Moriya, Toshio: 265(6AM1-2-3)
 Motoda, Hiroki: 93(5PM1-1-4)
 Motomura, Masato: 516(7AM1-1-3)
 Murai, Takahiro: 105(5PM1-2-2) , 109(5PM1-2-3) ,
 197(5PM2-2-5)
 Murakami, Yuma: 377(6PM1-1-3)
 Murayama, Takahiko: 209(5PM2-3-3)
 Muto, Yasuki: 424(6PM1-4-1)

N

Nagai, Takahiro: 137(5PM1-3-5) , 632(7AM2-4-4)
 Nagao, Yuto: 444(6PM2-1-1)
 Nagashima, Tomoharu: 201(5PM2-3-1)
 Nakagawa, Kazuho: 508(7AM1-1-1) , 644(7PM1-2-3)
 Nakajima, Shuro: 25(5AM1-2-2)
 Nakamura, Akira: 588(7AM2-2-1)
 Nakamura, Mitsuhiro: 620(7AM2-4-1)
 Nakamura, Ryota: 560(7AM1-4-2)
 Nakanishi, Masaki: 432(6PM1-4-3)
 Nakao, Hiroya: 125(5PM1-3-2) , 640(7PM1-2-2)
 Nakayama, Ariyoshi: 113(5PM1-2-4)
 Nakayama, Masashi: 253(6AM1-1-4)
 Nakayama, Masato: 13(5AM1-1-4) , 85(5PM1-1-2)
 , 169(5PM2-1-3) , 241(6AM1-1-1) ,
 524(7AM1-2-1) , 532(7AM1-2-3)
 Nakayama, Shigeru: 69(5AM1-4-3) , 149(5PM1-4-3)
 Nakazato, Hidenori: 365(6AM2-4-4)
 Narita, Tomoya: 117(5PM1-2-5)
 Narumiya, Yoshimasa: 233(5PM2-4-4) ,
 237(5PM2-4-5)
 Natsuno, Kazushige: 448(6PM2-1-2)
 Nawata, Masayoshi: 305(6AM2-1-1)
 Ninomiya, Hiroshi: 185(5PM2-2-2)
 Nishihara, Akinori: 245(6AM1-1-2) , 409(6PM1-3-2)
 Nishimoto, Takuya: 133(5PM1-3-4)
 Nishimura, Kiminobu: 177(5PM2-1-5)
 Nishio, Yoshifumi: 129(5PM1-3-3) , 133(5PM1-3-4)
 , 137(5PM1-3-5) , 225(5PM2-4-2)
 , 289(6AM1-4-1) , 357(6AM2-4-2)
 , 428(6PM1-4-2) , 440(6PM1-4-5)
 , 448(6PM2-1-2) , 552(7AM1-3-4)
 , 556(7AM1-4-1) , 628(7AM2-4-3) ,
 632(7AM2-4-4) , 681(7PM1-4-3)
 Nishiuchi, Yusuke: 361(6AM2-4-3)
 Nishiura, Takano: 13(5AM1-1-4) , 85(5PM1-1-2)
 , 169(5PM2-1-3) , 241(6AM1-1-1) ,
 524(7AM1-2-1) , 532(7AM1-2-3)
 Noguchi, Youhei: 201(5PM2-3-1)
 Numa, Masahiro: 373(6PM1-1-2)
 Numata, Kazumiti: 141(5PM1-4-1)
 Nunohiro, Eiji: 329(6AM2-2-3)

O

Ogawa, Naozumi: 444(6PM2-1-1)
 Ogawa, Tomomi: 592(7AM2-2-2)
 Ogawa, Toshiyuki: 596(7AM2-2-3)
 Ogino, Mikito: 492(6PM2-4-1)
 Ogose, Shigeaki: 464(6PM2-2-2)
 Ogura, Takeshi: 305(6AM2-1-1) , 377(6PM1-1-3)
 Ohashi, Hiromasa: 9(5AM1-1-3)
 Ohira, Takanori: 516(7AM1-1-3)
 Ohno, Kohei: 588(7AM2-2-1)
 Ohta, Mai: 460(6PM2-2-1)
 Ohtsuka, Yusuke: 65(5AM1-4-2)
 Okada, Hiraku: 33(5AM1-2-4)
 Okamoto, Koji: 681(7PM1-4-3)
 Okawa, Tomohisa: 89(5PM1-1-3)

Okura, Yushi: 349(6AM2-3-4)
Ono, Akira: 476(6PM2-3-1)
Osada, Keishi: 181(5PM2-2-1)
Osano, Saho: 165(5PM2-1-2)
Otake, Tsuyoshi: 456(6PM2-1-4) , 520(7AM1-1-4)
Otsu, Tomohiro: 673(7PM1-4-1)
Ott, Thomas: 357(6AM2-4-2)

P

Pongkittiphon, Teeraphon: 97(5PM1-1-5)

S

Saba, Takahiko: 385(6PM1-2-1)
Sadamoto, Taishi: 373(6PM1-1-2)
Saito, Daisuke: 97(5PM1-1-5)
Sakata, Shiro: 393(6PM1-2-3)
Sako, Shinji: 345(6AM2-3-3)
Sanada, Kosuke: 393(6PM1-2-3)
Sanada, Yuki: 516(7AM1-1-3)
Sasaki, Kyohei: 249(6AM1-1-3)
Sasaki, Ryuta: 600(7AM2-2-4)
Satake, Naoki: 397(6PM1-2-4)
Sato, Hiroyuki: 157(5PM1-4-5) , 608(7AM2-3-2)
Sato, Junya: 572(7AM2-1-1)
Sato, Kazuhito: 21(5AM1-2-1)
Sato, Masatoshi: 153(5PM1-4-4) , 165(5PM2-1-2) ,
353(6AM2-4-1)
Sato, Taichi: 113(5PM1-2-4)
Sato, Tomonobu: 564(7AM1-4-3)
Sekimoto, Shotarō: 101(5PM1-2-1)
Sekine, Tadatōshi: 484(6PM2-3-3)
Sekiya, Hiroo: 201(5PM2-3-1) , 393(6PM1-2-3)
Shi, Jin: 393(6PM1-2-3)
Shibayama, Naoki: 197(5PM2-2-5)
Shibuya, Naohiro: 552(7AM1-3-4)
Shima, Tomoya: 552(7AM1-3-4) , 556(7AM1-4-1)
Shimada, Ayana: 129(5PM1-3-3)
Shimamoto, Takashi: 444(6PM2-1-1)
Shindo, Takuya: 297(6AM1-4-3)
Shindoh, Masaki: 273(6AM1-3-1)
Shiokawa, Shigeki: 389(6PM1-2-2)
Shiozaki, Mitsuru: 209(5PM2-3-3) , 213(5PM2-3-4)
Shirasaki, Yudai: 289(6AM1-4-1)
Soneda, Yoshio: 416(6PM1-3-4)
Song, Tian: 444(6PM2-1-1)
Suetsugu, Tadashi: 201(5PM2-3-1)
Sueyoshi, Ryutarō: 105(5PM1-2-2) , 109(5PM1-2-3) ,
197(5PM2-2-5)
Suga, Norisato: 592(7AM2-2-2)
Sugiyama, Masaaki: 540(7AM1-3-1)
Suhara, Yuko: 85(5PM1-1-2)
Suzuki, Masayuki: 1(5AM1-1-1)
Suzuki, Satoru: 269(6AM1-2-4)
Suzuki, Tomoya: 349(6AM2-3-4) , 661(7PM1-3-3) ,
669(7PM1-3-5)

T

Tabata, Kenta: 113(5PM1-2-4)
Tabata, Koichi: 636(7PM1-2-1)
Tada, Junya: 45(5AM1-3-2)
Takagi, Masao: 476(6PM2-3-1)
Takahashi, Aya: 500(6PM2-4-3)
Takahashi, Haruhisa: 369(6PM1-1-1) ,
381(6PM1-1-4) , 540(7AM1-3-1) ,
580(7AM2-1-3) , 657(7PM1-3-2)
Takahashi, Keisuke: 512(7AM1-1-2)
Takahashi, Koichi: 317(6AM2-1-4)
Takahashi, Nobuaki: 456(6PM2-1-4) , 520(7AM1-1-4)
Takahashi, Satoru: 269(6AM1-2-4)
Takahashi, Tomohiro: 5(5AM1-1-2) , 405(6PM1-3-1)
Takamaru, Yuji: 357(6AM2-4-2) , 681(7PM1-4-3)
Takayama, Kei: 568(7AM1-4-4)
Takeda, Kazuhiro: 69(5AM1-4-3)
Takeda, Kazuya: 9(5AM1-1-3)
Takeuchi, Yohei: 29(5AM1-2-3) , 261(6AM1-2-2)
Tanaka, Kenta: 389(6PM1-2-2)
Tanaka, Kiyoshi: 157(5PM1-4-5)
Tanaka, Mamoru: 153(5PM1-4-4) , 165(5PM2-1-2)
, 173(5PM2-1-4) , 333(6AM2-2-4)
, 353(6AM2-4-1) , 456(6PM2-1-4)
, 500(6PM2-4-3) , 520(7AM1-1-4) ,
536(7AM1-2-4) , 685(7PM1-4-4)
Tanaka, Masahiro: 277(6AM1-3-2)
Tanito, Yuri: 305(6AM2-1-1)
Tateno, Katsumi: 436(6PM1-4-4)
Tawada, Keisuke: 616(7AM2-3-4)
Terada, Kenji: 313(6AM2-1-3)
Terao, Hirofumi: 325(6AM2-2-2)
Tokunaga, Tatsuki: 305(6AM2-1-1)
Tokushige, Hitoshi: 189(5PM2-2-3)
Tomita, Yohei: 177(5PM2-1-5)
Tone, Yusuke: 53(5AM1-3-4)
Toyoda, Akihito: 61(5AM1-4-1)
Tsuda, Toshitaka: 365(6AM2-4-4)
Tsuge, Satoru: 9(5AM1-1-3) , 17(5AM1-1-5)
Tsuji, Akinori: 313(6AM2-1-3)

U

Uchida, Atsushi: 49(5AM1-3-3)
Uchiyama, Tomo: 145(5PM1-4-2)
Ueta, Tetsushi: 57(5AM1-3-5) , 361(6AM2-4-3) ,
673(7PM1-4-1)
Ujii, Hiroaki: 205(5PM2-3-2)
Umematsu, Terumi: 528(7AM1-2-2)
Umetani, Tomohiro: 277(6AM1-3-2)
Unoki, Masashi: 249(6AM1-1-3)
Uwate, Yoko: 129(5PM1-3-3) , 137(5PM1-3-5)
, 289(6AM1-4-1) , 357(6AM2-4-2)
, 428(6PM1-4-2) , 440(6PM1-4-5)
, 448(6PM2-1-2) , 552(7AM1-3-4)
, 556(7AM1-4-1) , 628(7AM2-4-3) ,
632(7AM2-4-4) , 681(7PM1-4-3)

W

Wada, Masahiro: 277(6AM1-3-2)
Wada, Satomi: 141(5PM1-4-1)
Wang, Wei: 313(6AM2-1-3)
Watanabe, Hirotaka: 113(5PM1-2-4)
Watanabe, Hisashi: 229(5PM2-4-3) , 233(5PM2-4-4) ,
237(5PM2-4-5)
Watanabe, Shun: 101(5PM1-2-1)
Watanabe, Shigeyoshi: 480(6PM2-3-2)
Wei, Shaojun: 648(7PM1-2-4)
Wei, Xiuqin: 201(5PM2-3-1)
Wu, Xiao: 301(6AM1-4-4) , 488(6PM2-3-4)

X

Xin, Jingmin: 129(5PM1-3-3)
Xiong, Yijie: 624(7AM2-4-2)

Y

Yagi, Hideki: 117(5PM1-2-5)
Yamaguchi, Takahiro: 45(5AM1-3-2)
Yamaguchi, Yusaku: 309(5AM1-4-6)
Yamakawa, Takayuki: 353(6AM2-4-1)
Yamamoto, Akihiro: 381(6PM1-1-4)
Yamamoto, Hiroshi: 173(5PM2-1-4)
Yamamoto, Ryuichi: 345(6AM2-3-3)
Yamanaka, Kazuo: 661(7PM1-3-3)
Yamanaka, Manabu: 41(5AM1-3-1)
Yamashita, Yoichi: 13(5AM1-1-4)
Yamauchi, Kousuke: 677(7PM1-4-2)
Yamazaki, Sadaaki: 369(6PM1-1-1)
Yamazato, Takaya: 33(5AM1-2-4) , 225(5PM2-4-2)
Yanagihara, Yuki: 377(6PM1-1-3)
Yang, Guoan: 440(6PM1-4-5)
Yashima, Hiroyuki: 105(5PM1-2-2) , 109(5PM1-2-3)
, 197(5PM2-2-5) , 321(6AM2-2-1)
, 325(6AM2-2-2) , 600(7AM2-2-4) ,
636(7PM1-2-1)
Yasuda, Hiroyuki: 125(5PM1-3-2) , 640(7PM1-2-2)
Yasuno, Takashi: 273(6AM1-3-1) , 285(6AM1-3-4)
, 412(6PM1-3-3) , 416(6PM1-3-4) ,
665(7PM1-3-4)
Yendo, Tomohiro: 33(5AM1-2-4)
Yin, Shouyi: 648(7PM1-2-4)
Yokoyama, Yuta: 552(7AM1-3-4)
Yorozuya, Tomoaki: 229(5PM2-4-3) , 237(5PM2-4-5)
Yoshida, Daiki: 89(5PM1-1-3) , 113(5PM1-2-4)
Yoshida, Manabu: 580(7AM2-1-3)
Yoshimoto, Hiroyuki: 436(6PM1-4-4)
Yoshimoto, Naoki: 169(5PM2-1-3)
Yoshinaga, Tetsuya: 309(5AM1-4-6) , 217(5PM2-3-5)
Yotsuyanagi, Hiroyuki: 476(6PM2-3-1)
Yuenyong, Sumeth: 409(6PM1-3-2)

Z

Zhang, Peng: 29(5AM1-2-3)
Zhou, Renyan: 648(7PM1-2-4)