Session Schedule

Date/Time	Waikiki Ballroom I	Waikiki Ballroom II	Waikiki Ballroom III	Miro III
March 4, 10:00–11:30	Chaos Circuit 4AM1-1	Control Systems 4AM1-2	Image Processing 1 4AM1-3	[Special Session] Stochastic Resonance and its Application to Communications 4AM1-4
March 4, 13:00–14:30	Synchronization 4PM1-1	Data Analysis 4PM1-2	Image Processing 2 4PM1-3	4AM1-4 [Special Session] Complex Communication Sciences 4PM1-4
March 4, 14:50–16:20	[Special Session] Analysis and Design for Power Electronic Circuits 4PM2-1	Speech Recognition 4PM2-2	Image Processing 3 4PM2-3	Ad-Hoc and Sensor Network 4PM2-4
March 5, 09:00–10:30	Circuit Simulation 1 5AM1-1	Speech Processing 1 5AM1-2	[Special Session] Image Processing and Pattern Recognition 1 5AM1-3	Biocybernetics 5AM1-4
March 5, 10:50–12:20	Circuit Simulation 2 5AM2-1	Speech Processing 2 5AM2-2	[Special Session] Image Processing and Pattern Recognition 2 5AM2-3 Video and Signal	Bio-Inspired Network 5AM2-4
March 5, 13:20–14:50	Chaos and Modeling 5PM1-1	Speech Processing 3 5PM1-2	Video and Signal Image Processing 5PM1-3	Bioinformation 5PM1-4
March 5, 15:10–16:40	Circuit Theory 5PM2-1	Optimization 5PM2-2	Medical Applications 5PM2-3	[Special Session] Nonlinear Approach to Cognition and Brain-Inspired Intelligence 5PM2-4
March 6, 09:00–10:30	[Special Session] Cellular Neural Networks and their Applications 6AM1-1	Evolutional Computation 6AM1-2	Image Recognition 1 6AM1-3	Communication Systems 1 6AM1-4
March 6, 10:50–12:20	Bifurcation 6AM2-1	Detection 6AM2-2	Image Recognition 2 6AM2-3	Communication Systems 2 6AM2-4
March 6, 13:20–14:50	Coupled Oscillators 6PM1-1	Adaptive Systems 6PM1-2	[Special Session] Medical Images 6PM1-3	Filter 6PM1-4
March 6, 15:10–16:40	Complex Systems 6PM2-1	Estimation 6PM2-2	6PM1-3 Neural Network Applications 6PM2-3	Optical Communication 6PM2-4

Advanced Program (2012/2/22)

4AM1-1: Chaos Circuit

Date: March 4, 10:00–11:30 Room: Waikiki Ballroom Salon I Chair: Hiroyuki Kitajima (Kagawa University)

4AM1-2: Control Systems

Date: March 4, 10:00–11:30 Room: Waikiki Ballroom Salon II Chair: Tetsushi Ueta (Tokushima University)

4AM1-2-1 Utilization of Observer for the Motor Drive Arm Control

) Ivunichiro Tah

21

25

Atsushi Hoshiida (Nippon Institute of Technology), Sunao Tanimoto (Nippon Institute of Technology), Jyunichiro Tahara (Japan Agency for Marine-Earth Science and Technology)

4AM1-2-2 Design of an Augmented Automatic Choosing Control of Modified Filter Type and its Application to Power Systems

Hitoshi Takata (Kagoshima University), Tomohiro Hachino (Kagoshima University), Yoshiomi Hino (Kagoshima University), Kazutomo Yunokuchi (Kagoshima University), Hiromi Miyajima (Kagoshima University), Kazuto Komatsu (Kumamoto

National College of Technology)

4AM1-2-3 Output Control of Wind Power Generation System Based on Predictive Control 29

Takahiro Kitajima (The University of Tokushima), Takashi Yasuno (The University of Tokushima)

4AM1-2-4 Investigation of Collision Avoidance Using Vibration Device for Electric Wheelchair Support System

Takeshi Nakatani (The University of Tokushima), Takashi Yasuno (The University of Tokushima), Kenji Yamanaka (The University of Tokushima), Akinobu Kuwahara (The University of Tokushima)

4AM1-3: Image Processing 1

Date: March 4, 10:00–11:30 Room: Waikiki Ballroom Salon III Chair: Masayuki Ikebe (Hokkaido University)

4AM1-3-1Estimation of Solar Radiation Distribution Using Cloud Images37

Kiyoshi Takigawa (Shikoku Research Institute Inc.), Koichi Iwabu (Shikoku Research Institute Inc.), Takashi Yasuno (The University of Tokushima)

4AM1-3-2 Specifying Method of Cloud Area Affecting Solar Radiation on the Ground Using Cloud 41 Images 41

Koichi Iwabu (Shikoku Research Institute Inc.), Kiyoshi Takigawa (Shikoku Research Institute Inc.), Takashi Yasuno (The University of Tokushima)

4AM1-3-3 Detection of Architectural Distortion Based on Angles of Aberrant Mammary Gland

Yuki Hiramatsu (Ritsumeikan University), Yohei Fukumizu (Ritsumeikan University), Hironori Yamauchi (Ritsumeikan University), Hirotomi Chou (Shiga University of Medical Science), Yoshimasa Kurumi (Shiga University of Medical Science), Tohru Tani (Shiga University of Medical Science)

4AM1-3-4 A Cloth Simulation System to Select the Right Size

Den Nagaregawa (The University of Tokushima), Koji Kashihara (The University of Tokushima), Momoyo Ito (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

4AM1-4: [Special Session] Stochastic Resonance and its Application to Communications

Date: March 4, 10:00–11:30 Room: Milo III Chair: Hisato Fujisaka (Hiroshima City University)

4AM1-4-1 **Performance Evaluation of Delay Network with Stochastic Resonance**

Yukihiro Tadokoro (TOYOTA Central R&D Laboratories, Inc.), Seiya Kasai (Hokkaidou University), Akihisa Ichiki (TOY-OTA Central R&D Laboratories, Inc.)

4AM1-4-2 Effect of Periodic Dichotomous Noise Near Saddle-Node Bifurcation

Akihisa Ichiki (TOYOTA Central R&D Laboratories, Inc.), Yukihiro Tadokoro (TOYOTA Central R&D Laboratories, Inc.)

52

56

45

33

4AM1-4-3 Analysis of Stochastic Resonance in Quadruple-Well Potential

Shintaro Arai (Kagawa National College of Technology), Shota Ozaki (Kagawa National College of Technology), Takaya Yamazato (Nagoya University), Yoshifumi Nishio (Tokushima University)

60

92

4AM1-4-4Preliminary Study on BPSK Receiver Using Stochastic Resonance64

Hiroya Tanaka (Nagoya University), Takaya Yamazato (Nagoya University), Shintaro Arai (Kagawa National College of Technology)

4PM1-1: Synchronization

Date: March 4, 13:00–14:30 Room: Waikiki Ballroom Salon I Chair: Yoshihiko Horio (Tokyo Denki University)

4PM1-1-1 Noise-Induced Phase Synchronization Among Simple Digital Counters	68
Masakazu Matsuura (Hokkaido University), Tetsuya Asai (Hokkaido University), Masato Motomura (H	okkaido University)
4PM1-1-2 Double-Mode Simultaneous Oscillation in Three Coupled Hard Oscillators	72
Saori Fujioka (Tokushima University), Yang Yang (Xian Jiaotong University), Yoko Uwate (Tokushima fumi Nishio (Tokushima University)	a University), Yoshi-
4PM1-1-3 Synchronization of Switching Phenomena in Star-Coupled Chaotic System	76
Takuya Nishimoto (Shikoku University), Yasuteru Hosokawa (Shikoku University), Yoshifumi Nishio sity)	(Tokushima Univer-
4PM1-1-4 Chaos Synchronization Phenomena in Double Pendulum Robots	80
Yuki Tanda (Konan University), Tetsuya Yukinari (Konan University), Masahiro Wada (Konan University)	ty)

 4PM1-1-5
 Implementation of Complex-Valued CPG Network for Gait Generation of Real Quadruped
 84

 Robot
 84

Masahiro Kijima (The University of Tokushima), Takashi Yasuno (The University of Tokushima), Akinobu Kuwahara (The University of Tokushima)

4PM1-2: Data Analysis

Date: March 4, 13:00–14:30 Room: Waikiki Ballroom Salon II Chair: Takashi Yahagi (RISP)

 4PM1-2-1
 Data Sampling Strategies for Nonlinear Analyses and Long-Term Predictions of Deterministic Jump Systems

 Yousuke Otsuka (Ibaraki University)
 Tomoya Suzuki (Ibaraki University)

Yousuke Otsuka (Ibaraki University), Tomoya Suzuki (Ibaraki University)

4PM1-2-2 Initial Problems of State Equation Constructed by Covariance Structure Analysis

Shoko Matsuno (Sophia University), Mamoru Tanaka (Sophia University)

4PM1-2-3 Effect of Road Surface Condition for the Low Vision

Kayoko Matsubara (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Katsuya Sato (The University of Tokushima), Masayuki Booka (Hiroshima International University), Hidehisa Oku (Kobe Gakuin University), Shoichiro Fujisawa (The University of Tokushima)

96

100

104

4PM1-2-4 Compression Efficiency Study of Directional Morphological Wavelet Transform

Masayoshi Nawata (Ritsumeikan University), Shota Shirai (Ritsumeikan University), Masaki Nakai (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Tomohiro Fujita (Ritsumeikan University), Takeshi Ogura (Ritsumeikan University)

4PM1-2-5 A Novel Nonlinear Discriminant Analysis by Iterative Operations

Yohei Takeuchi (The University of Tokushima), Momoyo Ito (The University of Tokushima), Koji Kashihara (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

4PM1-3: Image Processing 2

Date: March 4, 13:00–14:30 Room: Waikiki Ballroom Salon III Chair: Yang Yang (Xi'an Jiaotong University)

4PM1-3-1 Background Subtraction Using Multi Radial Proportion Filter	108
Shinya Miyamori (Ritsumeikan University), Kazunori Saito (Ritsumeikan University), Yohei Fukumizu (Ritsumeikan versity), Hironori Yamauchi (Ritsumeikan University)	an Uni-
4PM1-3-2 Gaze Estimation Using 3D Active Appearance Models	112
Yukari Nakamatsu (Kobe University), Tetsuya Takiguchi (Kobe University), Yasuo Ariki (Kobe University)	
4PM1-3-3 Reconstruction of Face Figures from 2D Face Images	116
Kazuyasu Arakaki (Keio University), Yukio Sato (Keio University), Hideto Kameshima (Space Vision), Ikuji Hond University)	a (Keio
4PM1-3-4 Classification Back Shape of Bodies Using 3D Data	118
Atsushi Ishida (Keio University), Yukio Sato (Keio University), Ikuji Honda (Keio University)	
4PM1-3-5 Statistical Measurements of Plane Optical Flow for Image Restoration	121

Masato Makishima (Fukuoka Institute of Technology), Michiharu Maeda (Fukuoka Institute of Technology)

4PM1-4: [Special Session] Complex Communication Sciences

Date: March 4, 13:00–14:30 Room: Milo III Chair: Mikio Hasegawa (Tokyo University of Science)

4PM1-4-1 Analytical Method of Maximum UDP Throughput for One-Way Wireless Multi-Hop Networks Using Markov Chain Model 125

Kousuke Sanada (Chiba University), Hiroo Sekiya (Chiba University), Nobuyoshi Komuro (Chiba University), Shiro Sakata

(Chiba University)

4PM1-4-2 Chaotic Communications Effect in Chaotic Neural Networks with Refractoriness with Negatively Exponential Decay Correlated Inputs

Ken Umeno (National Institute of Information and Communications Technology), Mikio Hasegawa (Tokyo University of Science), Kazuyuki Aihara (University of Tokyo)

4PM1-4-3Improving Performance of Multi-Armed Bandit Algorithms Using Lebesgue Spectrum Fil-
ter130

Hiroshi Kurita (Tokyo University of Science), Tomohiro Kato (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science)

4PM1-4-4 Implementation and Evaluation of Chaotic CDMA System Using Software Defined Radio 134

Yuichi Omori (Tokyo University of Science), Hisashi Watanabe (Tokyo University of Science), Mikio Hasegawa (Tokyo University of Science)

4PM2-1: [Special Session] Analysis and Design for Power Electronic Circuits

Date: March 4, 14:50–16:20 Room: Waikiki Ballroom Salon I Chair: Hiroo Sekiya (Chiba University)

4PM2-1-1 Bifurcation in Buck Converter with Time Delay	138
Daiki Tanaka (Oita University), Hiroyuki Asahara (Oita University), Takuji Kousaka (Oita University)	
	1.40
4PM2-1-2 Nonlinear Dynamics of Switching Power Converters with Solar Cell Input	142
Takaaki Matsumoto (Hosei University), Toshimichi Saito (Hosei University)	
	146
4PM2-1-3 An Enhanced PSO Algorithm for Designing Class E Amplifier	146
Yuichi Tanji (Kagawa University), Haruna Matsushita (Kagawa University), Hiroo Sekiya (Chiba University)	
4PM2-1-4 Analytical Expressions for Class- $mathbf E_M$ Power Amplifier	150
Xiuqin Wei (Chiba University), Tomoharu Nagashima (Chiba University), Tadashi Suetsugu (Fukuoka University), S Kuroiwa (Chiba University), Hiroo Sekiya (Chiba University)	hingo
4PM2-1-5 Approximate Analysis for Class- $mathbfE_M$ Amplifier Taking into Account Harmonic Frequency Components	154
Taro Kakimoto (Chiba University), Tomoharu Nagashima (Chiba University), Xiuqin Wei (Chiba University), Hiroo S (Chiba University)	ekiya

4PM2-2: Speech Recognition

Date: March 4, 14:50–16:20 Room: Waikiki Ballroom Salon II Chair: Shinichi Kawamoto (JAIST)

 4PM2-2-1
 Acoustic Model Selection Method for Speaker Dependent Speech Recognition
 158

Kentaro Mori (The University of Tokushima), Satoru Tsuge (Daido University), Shingo Kuroiwa (Chiba University), Mo-

moyo Ito (The University of Tokushima), Koji Kashihara (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

4PM2-2-2 Automatic Speech Recognition with Confidence Measures Obtained by Multiple Recognizers 162 of Various Recognition Units

Nobuhisa Suzuki (Doshisha University), Tomoyuki Tanaka (Doshisha University), Masafumi Nishida (Doshisha University), Seiichi Yamamoto (Doshisha University)

166 4PM2-2-3 An Experimental Study on Dynamic Features of Speech Structure

Shinya Shimizu (The University of Tokyo), Masayuki Suzuki (The University of Tokyo), Nobuaki Minematsu (The University of Tokyo), Keikichi Hirose (The University of Tokyo)

170 4PM2-2-4 Phoneme Recognition Based on AF-HMMs with an Optimal Parameter Set

Narpendyah Ariwardhani (Toyohashi University of Technology), Yurie Iribe (Toyohashi University of Technology), Kouichi Katsurada (Toyohashi University of Technology), Tsuneo Nitta (Toyohashi University of Technology)

4PM2-2-5 Design of a HMM-Based Speech Recognition Circuit for Robust Keyword Spotting 174

Katsuya Takahashi (Hokkaido University), Wataru Takahashi (Hokkaido University), Shingo Yoshizawa (Hokkaido University), Yoshikazu Miyanaga (Hokkaido University)

4PM2-3: Image Processing 3

Date: March 4, 14:50-16:20 Room: Waikiki Ballroom Salon III Chair: Hironobu Fukai (Ritsumeikan University)

4PM2-3-1 Robust Method for Seamless Image Mosaic Generated from Insufficiently Aligned Images 178

Saori Joichi (The University of Electro-Communications), Wataru Mitsuhashi (The University of Electro-Communications)

Highly-Parallel Watermarking Implementation for Max-Plus Algebra Morphological 4PM2-3-2 182 Wavelet Transform with Massive-Parallel SIMD Matrix Evaluation Board

Yuma Murakami (Ritsumeikan University), Masahiro Osawa (Ritsumeikan University), Shuhei Itaya (Ritsumeikan University), Naoki Matsumoto (Ritsumeikan University), Kei Nakao (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Takeshi Ogura (Ritsumeikan University), Takeshi Fujino (Ritsumeikan University)

4PM2-3-3 Fast Single Image Dehazing Using Local Statistics of Dark Channel

Akira Mizuno (Hokkaido University), Masayuki Ikebe (Hokkaido University), Masaki Igarashi (Hokkaido University), Sousuke Shimoyama (Hokkaido University), Junichi Motohisa (Hokkaido University)

4PM2-3-4 A Sharpening Method of Enlarged Image Using Restoration Parameters Embedded to a 190 **Decimated Image**

Hideaki Kawano (Kyushu Institute of Technology), Hiroyuki Manabe (Kyushu Institute of Technology), Hideaki Orii (Kyushu Institute of Technology), Hiroshi Maeda (Kyushu Institute of Technology)

4PM2-3-5 Robust Texture Image Retrieval Method Using Support Vector Machine

Syota Takei (Tokyo Denki University), Shigeo Wada (Tokyo Denki University)

186

4PM2-4: Ad-Hoc and Sensor Network

Date: March 4, 14:50–16:20 Room: Milo III Chair: Kui-Ting Chen (Waseda University)

4PM2-4-1 QoS Control Method in the Ad Hoc Network Based on the Required Bit Rate	198	
Kosuke Ohata (Tokyo University of Information Sciences), Tomoya Yamazaki (Tokyo University of Information Sciences), Masaki Hanada (Tokyo University of Information Sciences), MooWan Kim (Tokyo University of Information Sciences)		
4PM2-4-2 Multipoint Relay with Energy-Awareness for System Data Sharing in WSN	202	
Jiaqi Zhang (Waseda University), Kui-Ting Chen (Waseda University), Molin Jia (Waseda University), Takaaki Baba (Waseda University)		
4PM2-4-3 CA Based Autonomous Control Method for Networks of Randomly Distributed Sensors	206	
Naoyuki Hashimoto (Kagawa University), Hiroyuki Kitajima (Kagawa University)		
4PM2-4-4 New Asymmetric ZCZ Sequence Sets Based on DFT Matrices	210	
Hideyuki Torii (Kanagawa Institute of Technology), Takahiro Matsumoto (Yamaguchi University), Makoto Nakamura (Kana- gawa Institute of Technology)		
4PM2-4-5 Novel Path Search Method Using Neighborhood Information in Random Network	214	
Takuma Nosaka (Sophia University), Masatoshi Sato (Sophia University), Mamoru Tanaka (Sophia University)		

5AM1-1: Circuit Simulation 1

Date: March 5, 09:00–10:30 Room: Waikiki Ballroom Salon I Chair: Hiroyuki Yotsuyanagi (Tokushima University)

SAM1-1-1Evaluation of Pseudo-Random Sequences Generated with a Cellular Array Models of217**Reaction-Diffusion Systems**

Keisuke Nagata (Hiroshima City University), Hisato Fujisaka (Hiroshima City University), Takeshi Kamio (Hiroshima City University), Kazuhisa Haeiwa (Hiroshima City University)

5AM1-1-2	Generation and Application of Multi-Band Pulse Sequences	221
X7.1. A		<u> </u>

Yuki Aratani (Hiroshima City University), Takeshi Kamio (Hiroshima City University), Kazuhisa Haeiwa (Hiroshima City University)

 5AM1-1-3
 Fast Transistor Sizing Method Using Graph Based Operating Point Driven Formulation
 225

 Kenta Nose (Ritsumeikan University), Daisuke Nakai (Ritsumeikan University), Tomohiro Fujita (Ritsumeikan University)
 229

 5AM1-1-4
 A Memristor-Based Synaptic Device Having an Asymmetric STDP Time Window
 229

 Taku Adachi (Hokkaido University), Tetsuya Asai (Hokkaido University), Masato Motomura (Hokkaido University)
 229

SAM1-1-5Output Voltage of a Floating Metal Line Caused by a Neighboring Metal Line Bending at a233Right Angle

Ei Haraguchi (The University of Tokushima), Syohei Kondo (The University of Tokushima), Katsuya Manabe (Kagawa

National College of Technology), Hiroyuki Yotsuyanagi (The University of Tokushima), Masaki Hashizume (The University of Tokushima)

5AM1-2: Speech Processing 1

Date: March 5, 09:00-10:30 Room: Waikiki Ballroom Salon II Chair: Greg Short (Tokyo University)

5AM1-2-1 Study on Robust Voice Activity Detection Using Empirical Mode Decomposition and Mod-237 ulation Spectrum Analysis

Yasuaki Kanai (Japan Advanced Institute of Science and Technology), Masashi Unoki (Japan Advanced Institute of Science and Technology)

241 5AM1-2-2 A Study of Speaker-Dependence Estimation in Reverberant Speech Recognition

Takahiro Fukumori (Ritsumeikan University), Masanori Morise (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University), Yoichi Yamashita (Ritsumeikan University)

5AM1-2-3 An Evaluation of Demodulation in Distance for Parametric Loudspeaker Based on Sub-245 **Band Spectral Envelope**

Daisuke Ikefuji (Ritsumeikan University), Masanori Morise (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University)

5AM1-2-4 Elemental Study of ACE Method Based on OSL as Hearing Aid for Sensorineural Hearing 249 Losses

Yutaka Suzuki (University of Yamanashi), Osamu Sakata (University of Yamanashi), Shun-ichi Imamura (University of Yamanashi), Shuichiro Endo (University of Yamanashi), Akihito Mizukoshi (University of Yamanashi), Asobu Hattori (Tokyo Metropolitan Industrial Technology Research Institute), Nozomu Iida (University of Yamanashi), Hayato Waki (University of Yamanashi)

5AM1-2-5 Combination of SPLICE and Feature Normalization for Noise Robust Speech Recognition 253

Tsunenobu Kai (The University of Tokyo), Masayuki Suzuki (The University of Tokyo), Keigo Chijiiwa (The University of Tokyo), Nobuaki Minematsu (The University of Tokyo), Keikichi Hirose (The University of Tokyo)

5AM1-3: [Special Session] Image Processing and Pattern Recognition 1

Date: March 5, 09:00-10:30 Room: Waikiki Ballroom Salon III Chair: Yoshifumi Nishio (Tokushima University)

5AM1-3-1 Nonrigid Face Alignment Using Relative Motion Prior

Yang Yang (Xi'an Jiaotong University), Yuehu Liu (Xi'an Jiaotong University), Yuanqi Su (Xi'an Jiaotong University), Yoshifumi Nishio (Tokushima University)

5AM1-3-2 A Visual Object Acquiring Platform with Selective Attention

Shaozhuo Zhai (Xian Jiaotong University), Yuehu Liu (Xian Jiaotong University), Ming Hou (Xian Jiaotong University)

5AM1-3-3 EEG Feature Extraction for Quantification of Human-Interest

257

sukura (Keio University)

5AM1-3-4Walking Motion Feature Detection System Based on EEG Analysis269

Nobuhisa Kuramoto (The University of Tokushima), Shin-ichi Ito (The University of Tokushima), Katsuya Sato (The University of Tokushima), Shoichiro Fujisawa (The University of Tokushima)

5AM1-3-5On Investigation of the Intensity Scaling Factor in Fractal Image Coding273

Yoshinori Kitano (Tokushima University), Tetsushi Ueta (Tokushima University), Yoshifumi Nishio (Tokushima University), Guoan Yang (Xi'an Jiaotong University), Yang Yang (Xi'an Jiaotong University)

5AM1-4: Biocybernetics

Date: March 5, 09:00–10:30 Room: Milo III Chair: Kiyohisa Natsume (Kyushu Institute of Technology)

5AM1-4-1 Analysis of NIRS Data from Real and Imagined Complex Finger Tapping Task	277		
Kentaro Murasugi (Tokyo Denki University), Masaharu Adachi (Tokyo Denki University)			
EZML 4. 2. Speech Decognition of Whisper Voice Decod on EMC Signals	281		
5AM1-4-2 Speech Recognition of Whisper Voice Based on EMG Signals	201		
Natsumi Ohtani (Tokushima University), Yohei Takeuchi (Tokushima University), Momoyo Ito (Tokushima University), Koji Kashihara (Tokushima University), Minoru Fukumi (Tokushima University)			
5AM1-4-3 Classification of Ankle Motions by EMG	285		
Yusuke Yamamura (Tokushima University), Yohei Takeuchi (Tokushima University), Momoyo Ito (Tokushima University), Koji Kashihara (Tokushima University), Minoru Fukumi (Tokushima University)			
5AM1-4-4 A Study of the Influence on EEG Activity by Hearing Emotional Voice	289		
Yoshihiro Ono (Nagoya Institute of Technology), Shinji Sako (Nagoya Institute of Technology), Arao Funase (Nagoya Institute of Technology), Tadashi Kitamura (Nagoya Institute of Technology)			
5AM1-4-5 Visual Illusion of Depth Perception During Car Driving	293		
Yuki Ikami (The University of Tokushima), Koji Kashihara (The University of Tokushima), Momoyo Ito (The Universi Tokushima), Minoru Fukumi (The University of Tokushima)	ity of		

5AM2-1: Circuit Simulation 2

Date: March 5, 10:50–12:20 Room: Waikiki Ballroom Salon I Chair: Xiuqin Wei (Chiba University)

5AM2-1-1Phase Change Memory Cell Designed by Saito's $\Sigma \Delta$ AD Converter297

Aya Takahashi (Sophia University), Toshimichi Saito (Hosei University), Mamoru Tanaka (Sophia University)

5AM2-1-2An Implementation of an A/D Converter Based on the Negative β -Map301

Mitsuhiro Nakamura (Tokyo Denki University), Yoshihiko Horio (Tokyo Denki University), Tohru Kohda (Kyushu Univer-

sity), Kazuyuki Aihara (The University of Tokyo)

5AM2-1-3 Error Characteristics of A/D Converters with Time-Variant Window Depending on Input	305	
Takafumi Kosoba (Hosei University), Toshimichi Saito (Hosei University)		
5AM2-1-4 Research on DC-DC Converter of Solar Battery with Spiral Mutual Inductor	309	
Sho Shimizu (Sophia University), Masayuki Yamauchi (Hiroshima Institute of Technology), Mamoru Tanaka (Sophia University)		
5AM2-1-5 Steady-State Behavior of Class-E Amplifier Outside Nominal Operation Taking into Account	313	

MOSFET-Body-Diode Effect

Tomoharu Nagashima (Chiba University), Hiroo Sekiya (Chiba University)

5AM2-2: Speech Processing 2

Date: March 5, 10:50–12:30 Room: Waikiki Ballroom Salon II Chair: Atsuo Suemitsu (JAIST)

Misaki Tsujikawa (Ritsumeikan University), Masanori Morise (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University) 321 5AM2-2-2 Steering of Localization Sensation on Sound Image with Hybrid Combination of Parametric Loudspeakers and Subwoofer 321 Yutaro Sugibayashi (Ritsumeikan University), Sota Kurimoto (Ritsumeikan University), Masanori Morise (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University) 321 5AM2-2-3 Fundemental Freaquency Extraction of Speech in Time-Varying Noise 325 Tatsuki Kina (Saitama University), Tetsuya Shimamura (Saitama University) 329 SAM2-2-4 The Application of Isolated Word Recognition to Continuous Speech for Robust Keyword Spotting 329 Wataru Takahashi (Hokkaido University), Yoshikazu Miyanaga (Hokkaido University) 329	5AM2-2-1 A Study of Comfortable Sound Design for Stationary Noise Environments Based on Auditory Masking	317
Loudspeakers and Subwoofer 321 Yutaro Sugibayashi (Ritsumeikan University), Sota Kurimoto (Ritsumeikan University), Masanori Morise (Ritsumeikan University), Takanobu Nishiura (Ritsumeikan University) 325 5AM2-2-3 Fundemental Freaquency Extraction of Speech in Time-Varying Noise 325 Tatsuki Kina (Saitama University), Tetsuya Shimamura (Saitama University) 325 5AM2-2-4 The Application of Isolated Word Recognition to Continuous Speech for Robust Keyword Spotting 329		neikan
versity), Takanobu Nishiura (Ritsumeikan University) 325 5AM2-2-3 Fundemental Freaquency Extraction of Speech in Time-Varying Noise 325 Tatsuki Kina (Saitama University), Tetsuya Shimamura (Saitama University) 325 5AM2-2-4 The Application of Isolated Word Recognition to Continuous Speech for Robust Keyword 329		321
Tatsuki Kina (Saitama University), Tetsuya Shimamura (Saitama University) 5AM2-2-4 The Application of Isolated Word Recognition to Continuous Speech for Robust Keyword Spotting		n Uni-
5AM2-2-4 The Application of Isolated Word Recognition to Continuous Speech for Robust Keyword 329 Spotting 329	5AM2-2-3 Fundemental Freaquency Extraction of Speech in Time-Varying Noise	325
Spotting 329	Tatsuki Kina (Saitama University), Tetsuya Shimamura (Saitama University)	
Wataru Takahashi (Hokkaido University), Yoshikazu Miyanaga (Hokkaido University)		329
	Wataru Takahashi (Hokkaido University), Yoshikazu Miyanaga (Hokkaido University)	
5AM2-2-5 Speech Enhancement Technique in Noisy Reverberant Environment Using Two Microphone 333 Arrays 333		333

Yuuki Sasaki (Japan Advanced Institute of Science and Technology), Masato Akagi (Japan Advanced Institute of Science and Technology)

5AM2-3: [Special Session] Image Processing and Pattern Recognition 2

Date: March 5, 10:50–12:30 Room: Waikiki Ballroom Salon III Chair: Yasue Mitsukura (Keio University)

5AM2-3-1 Modification of Indistinguishable Colors for Color Defective Vision

337

Hironori Takimoto (Okayama Prefectural University), Saori Kamio (Okayama Prefectural University), Hitoshi Yamauchi

5PM1-1-1 Chaotic Cipher Using a Map Generated by the Mersenne Twister

Daiki Yoshida (Meiji University), Ariyoshi Nakayama (Meiji University), Hirotaka Watanabe (Meiji University), Taichi Sato (Meiji University), Yoshiaki Kawanishi (Meiji University), Syuhei Kuriyama (Meiji University), Syohei Honda (Meiji

Hironobu Fukai (Ritsumeikan University), Yasue Mitsukura (Keio University)
5AM2-3-3 A Robust Pose Estimation Method for Nearly Coplanar Points 345
Haiwei Yang (Xi'an Jiaotong University), Fei Wang (Xi'an Jiaotong University), Jingmin Xin (Xi'an Jiaotong University), Xuetao Zhang (Xi'an Jiaotong University), Yoshifumi Nishio (Tokushima University)
5AM2-3-4 Facet-Growing Approach to Point Cloud Segmentation Using Local Convexity and Octree 349
Huan Fu (Xi'an Jiaotong University), Fei Wang (Xi'an Jiaotong University), Yoshifumi Nishio (Tokushima University), Yongjian He (Xi'an Jiaotong University), Chengwei Hu (China Academy of Space Technology)
5AM2-4: Bio-Inspired Network
Date: March 5, 10:50–12:30
Room: Milo III Chair: Masaharu Adachi (Tokyo Denki University)
5AM2-4-1 Excitable Reaction-Diffusion Media with Memristors 353
Xiyuan Gong (Hokkaido University), Tetsuya Asai (Hokkaido University), Masato Motomura (Hokkaido University)
5AM2-4-2 Noise-Assisted Spike Transmission on an Array of Electrical FitzHugh-Nagumo Models 357
Lizeth Gonzalez-Carabarin (Hokkaido University), Tetsuya Asai (Hokkaido University), Masato Motomura (Hokkaido University)
5AM2-4-3 Proposal of a Trigonometric Polynomial Unit for Neural Networks 361
Hiroki Yoshimura (Tottori University), Tadaaki Shimizu (Tottori University), Toshie Matsumura (Nara National College of Technology), Maiya Hori (Tottori University), Yoshio Iwai (Tottori University)
SAM2-4-4 Improvement of Learning Performance of Neural Network Using Neurogenesis 365
Yuta Yokoyama (Tokushima University), Tomoya Shima (Tokushima University), Chihiro Ikuta (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)
5AM2-4-5 Hopfield Neural Network with Glial Network 369
Chihiro Ikuta (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University), Guoan Yang (Xi'an Jiaotong University)
5PM1-1: Chaos and Modeling
Date: March 5, 13:20–14:50 Room: Waikiki Ballroom Salon I Chair: Hironori Kumeno (Tokushima University)

5AM2-3-2 Design Support System for Coloring Illustrations Based on Human Preference

(Okayama Prefectural University), Mitsuru Jindai (Okayama Prefectural University)

341

University), Hiroyuki Kamata (Meiji University)

5PM1-1-2 Study on the Characteristic Analysis and Evaluation of Digital Chaotic System Operated by the Fixed Point Arithmetic	377	
Hirotaka Watanabe (Meiji University), Taichi Sato (Meiji University), Ariyoshi Nakayama (Meiji University), Daiki Yoshida (Meiji University), Yoshiaki Kawanishi (Meiji University), Hiroyuki Kamata (Meiji University)		
5PM1-1-3 Analysis and Synthesis of Time Series Waveform by Covariance Structure Analysis	381	
Yoshiyuki Kobori (Sophia University), Masatoshi Sato (Sophia University), Mamoru Tanaka (Sophia University)		
5PM1-1-4 The Electric Potential Distribution by Maximum Flow Neural Network	385	
Masatoshi Sato (Sophia University), Mamoru Tanaka (Sophia University)		

5PM1-2: Speech Processing 3

Date: March 5, 13:20–14:50 Room: Waikiki Ballroom Salon II Chair: Takanobu Nishiura (Ritsumeikan University)

5PM1-2-1 Perceptually-Based Lexical Accent Recognition for a Japanese CALL System	389			
Greg Short (Tokyo University), Keikichi Hirose (Tokyo University), Nobuaki Minematsu (Tokyo University)				
5PM1-2-2 Investigation of Perceptual Effects During Learning Process via Vowel Imitation	393			
Kazuya Fujii (Japan Advanced Institute of Science and Technology), Atsuo Suemitsu (Japan Advanced Institute of Sci and Technology), Jianwu Dang (Japan Advanced Institute of Science and Technology / Tianjin University)	ence			
5PM1-2-3 Detecting Sound Leakage from Headphones by Using Lavaliere Microphones	397			
Kazufumi Nakamura (Hosei University), Katunobu Itou (Hosei University)				
5PM1-2-4 Study of Hearing Impression of Speaker Identification Focusing on Dynamic Features	401			
Tsuyoshi Izumida (Japan Advanced Institute of Science and Technology), Masato Akagi (Japan Advanced Institute of Science and Technology)				
5PM1-2-5 Reconstruction of Music from Network Motifs Using Real Sound Synthesis	405			

Tetsuya Yukinari (Konan University), Yuki Tanda (Konan University), Masahiro Wada (Konan University)

5PM1-3: Video and Signal Image Processing

Date: March 5, 13:20–14:50 Room: Waikiki Ballroom Salon III Chair: Tian Song (Tokushima University)

5PM1-3-1 Implementation Results and Application of Real-Time Morphological Pattern Spectrum Analyzer on Cellular-Automata Hardware

Zarina Rafii (Ritsumeikan University), Kumaki Takeshi (Ritsumeikan University), Fujita Tomohiro (Ritsumeikan University), Mamoru Nakanishi (NTT Microsystem Integrations Laboratories), Ogura Takeshi (Ritsumeikan University)

Takahiro Suzuki (Waseda University), Takeshi Ikenaga (Waseda University)

5PM1-3-2 Corner Detection Based Low Complexity SIFT Algorithm for Real-time Keypoints Matching

5PM1-3-3 Motion Vector Management Architecture for 4K Resolution H.264/AVC Decoder 417

Kentaro Takei (Tokushima University), Takafumi Bando (Tokushima University), Naoyuki Ishikura (Tokushima University), Tian Song (Tokushima University), Takashi Shimamoto (Tokushima University)

5PM1-3-4 Color-Based Tracking Method of Objects for Accommodating Target's Pose and Appearance 421

Yojiro Oyama (Keio University), Satoshi Hirose (Keio University), Nozomu Hamada (Keio University)

5PM1-4: **Bioinformation**

Date: March 5, 13:20-14:50 Room: Milo III Chair: Yasuteru Hosokawa (Shikoku University)

5PM1-4-1 Effect of Alcohol Concentrations in Blood on Voice Signals from Human Body 425

Naoki Fujiwara (Tottori University), Akihiro Tanaka (Tottori University), Kentaro Kinoshita (Tottori University), Satoru Kishida (Tottori University)

5PM1-4-2 Robust Detecting Method of Absolute Arrhythmia

Kenji Hashiodani (Ritsumeikan University), Shinichi Takada (Ritsumeikan University), Yohei Fukumizu (Ritsumeikan University), Hironori Yamauchi (Ritsumeikan University), Yoshimasa Kurumi (Shiga University of Medical Science), Tohru Tani (Shiga University of Medical Science)

5PM1-4-3 Recognition of Finger Motion by Wrist EMG

Takahide Funabashi (Tokushima University), Momoyo Ito (Tokushima University), Koji Kashihara (Tokushima University), Minoru Fukumi (Tokushima University)

437 5PM1-4-4 **Evaluation Method for Riding Comfort on Bike Using the Biological Signal**

Kei Takaoka (Tokyo University of Agriculture and Technology), Taiki Fuji (Tokyo University of Agriculture and Technology), Kouji Takao (Bridgestone Corporation), Kazutomo Murakami (Bridgestone Corporation), Takatsugu Hashimoto (Bridgestone Corporation), Yasue Mitsukura (Keio University)

5PM1-4-5 **Investigation of Biometric Date Input to Multi-Layer Perceptron**

Kana Kurata (Tokushima University), Chihiro Ikuta (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

5PM2-1: Circuit Theory

Date: March 5, 15:10-16:40 Room: Waikiki Ballroom Salon I Chair: Mamoru Tanaka (Sophia University)

5PM2-1-1 On Measuring Timing Slack Using Boundary Scan with Time-to-Digital Converter for De-445 tecting Delay Faults

Hiroyuki Makimoto (The University of Tokushima), Hiroyuki Yotsuyanagi (The University of Tokushima), Masaki

441

429

413

Hashizume (The University of Tokushima)

 5PM2-1-2
 The Test Vector Compaction Considering Compatible Flip-Flops for BIST-Aided Scan Test
 449

 Yasuhiko Okada (Tokushima University), Hiroyuki Yotsuyanagi (Tokushima University), Masaki Hashizume (Tokushima University)
 449

 5PM2-1-3
 Switched-Capacitor Circuit Implementation of the Golden Ratio Encoder - Effects of Offset
 453

 Voltage and Finite Gain of the Op-Amp 453

Hirotaka Fukushima (Tokyo Denki University), Yoshihiko Horio (Tokyo Denki University), Kazuyuki Aihara (The University of Tokyo)

5PM2-1-4Observation of Bifurcation Phenomena in PWM-1 Controlled System with Switching Delay457

Kenichi Tasaki (Oita University), Hiroyuki Asahara (Oita University), Takuji Kousaka (Oita University)

5PM2-1-5An Efficient Transient Simulation Method for Multilayered Power/Ground Planes Using461Hybrid Modeling Method461

Takayuki Watanabe (University of Shizuoka)

5PM2-2: **Optimization**

Date: March 5, 15:10–16:40 Room: Waikiki Ballroom Salon II Chair: Tomoya Suzuki (Ibaraki University)

5PM2-2-1 Classification Function of Radial Basis Adaptive Resonance Theory Maps and its Applica- tion	465
Yoko Enosawa (Hosei University), Haruna Matsushita (Kagawa University), Yasuhiro Tanaka (Tanaka Women's O Naoaki Kuji (Keio University), Toshimichi Saito (Hosei University)	Clinic),
5PM2-2-2 Parallel Learning of Growing SOMs and Application to TSP	469
Kazuki Sunakawa (Hosei University), Toshimichi Saito (Hosei University)	
5PM2-2-3 Improvement in Solution Search Performance of Deterministic PSO Using a Golden Angle	473
Takuya Shindo (Nippon Institute of Technology), Ryousuke Sano (Hosei University), Toshimichi Saito (Hosei Unive Kenya Jin'no (Nippon Institute of Technology)	ersity),
5PM2-2-4 Combinatorial Optimization by the Cooperative Mechanism of Ant Colony and Aphid	477
Naoto Hara (Tokushima University), Yudai Shirasaki (Tokushima University), Sho Shimomura (Tokushima University) Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)), Yoko
5PM2-2-5 Application of Ant Colony Optimization Using Genetic Information to QAP	481
Sho Shimomura (Tokushima University), Haruna Matsushita (Kagawa University), Yoko Uwate (Tokushima University) Yoshifumi Nishio (Tokushima University)	ersity),

5PM2-3: Medical Applications

Date: March 5, 15:10–16:40 Room: Waikiki Ballroom Salon III Chair: Tadashi Yamaguchi (Chiba University)

5PM2-3-1 Theoretical and Experimental Study of Continuous-Time Image Reconstruction System for 485 **Computed Tomography**

Yusaku Yamaguchi (The University of Tokushima), Ken'ichi Fujimoto (The University of Tokushima), Tetsuya Yoshinaga (The University of Tokushima)

5PM2-3-2 Convergence of Iterative Method as Discretization of Continuous-Time Image Reconstruc-489 tion System for Computed Tomography

Kiyoko Tateishi (The University of Tokushima), Ken'ichi Fujimoto (The University of Tokushima), Tetsuya Yoshinaga (The University of Tokushima)

5PM2-3-3 Automatic Detecting Stenotic Murmur Method for Portable Medical System Based on Time-493 domain PCA and EM Algorithm

Shinichi Takada (Ritsumeikan University), Kenji Hashiodani (Ritsumeikan University), Yohei Fukumizu (Ritsumeikan University), Hironori Yamauchi (Ritsumeikan University), Hiroshi Sakai (Shiga University of Medical Science), Minoru Horie (Shiga University of Medical Science)

5PM2-3-4 Morphological Personalization According to Human Mechanism Using MR Images 497

Nana Nishimura (Japan Advanced Institute of Science and Technology), Shin'ichi Kawamoto (Japan Advanced Institute of Science and Technology), Jianwu Dang (Japan Advanced Institute of Science and Technology / Tianjin University)

5PM2-4: [Special Session] Nonlinear Approach to Cognition and Brain-Inspired Intelligence

Date: March 5, 15:10-16:40 Room: Milo III Chair: Katsumi Tateno (Kyushu Institute of Technology)

5PM2-4-1 The Change in EEG When You Are Bored	499
Touma Katayama (Kyushu Institute of Technology), Kiyohisa Natsume (Kyushu Institute of Technology)	
5PM2-4-2 Directional Spike Propagation in a Recurrent Network Affected by Synaptic Plasticity Changing Intensity and Timing of Inhibition	503
Toshikazu Samura (Kyushu Institute of Technology), Hatsuo Hayashi (Kyushu Institute of Technology)	
SPM2-4-3 Synchronization in the Taste Bud-Inspired Sensor Network	507
Katsumi Tateno (Kyushu Institute of Technology), Yoshitaka Ohtubo (Kyushu Institute of Technology)	
5PM2-4-4 Attractor Dynamics Approach to Vehicle Behavior Control: a Transformation between Different State-Space of Nonlinear Dynamics	511
Hiroaki Wagatsuma (Kyushu Institute of Technology), Kosuke Ono (Kyushu Institute of Technology)	
5PM2-4-5 An Application of Attractor Dynamics to Autocruise Control Systems by Using a Mobile Robot and Real-Time Simulator	513
 Toshikazu Samura (Kyushu Institute of Technology), Hatsuo Hayashi (Kyushu Institute of Technology) 5PM2-4-3 Synchronization in the Taste Bud-Inspired Sensor Network Katsumi Tateno (Kyushu Institute of Technology), Yoshitaka Ohtubo (Kyushu Institute of Technology) 5PM2-4-4 Attractor Dynamics Approach to Vehicle Behavior Control: a Transformation between Different State-Space of Nonlinear Dynamics Hiroaki Wagatsuma (Kyushu Institute of Technology), Kosuke Ono (Kyushu Institute of Technology) 5PM2-4-5 An Application of Attractor Dynamics to Autocruise Control Systems by Using a Mobile 	507 511

Kosuke Ono (Kyushu Institute of Technology), Hiroaki Wagatsuma (Kyushu Institute of Technology)

6AM1-1: [Special Session] Cellular Neural Networks and their Applications

Date: March 6, 09:00-10:30 Room: Waikiki Ballroom Salon I Chair: Masatoshi Sato (Sophia University)

6AM1-1-1 Combination of Two Neurons for a Cell in Cellular Neural Networks	515
Nurul Amirah binti Ramlan (Tokushima University), Yoshihiro Kato (Tokushima University), Yasuhiro Ueda (Tokus University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)	shima
6AM1-1-2 Shift-Variant Discrete-Time Cellular Neural Network for Image Coding	519
Kei Chiba (Tamagawa University), Tsuyoshi Otake (Tamagawa University), Hisashi Aomori (Tokyo University of Scie Nobuaki Takahashi (IBM), Mamoru Tanaka (Sophia University)	ence),
6AM1-1-3 Checking Method of State Equation Constructed by Covariance Structure Analysis	523
Shizuka Gondo (Sophia University), Mamoru Tanaka (Sophia University)	
6AM1-1-4Dynamical ADC Image Processing of CNN by Saito's Rotation MapJun Kamijo (Sophia University), Mamoru Tanaka (Sophia University), Toshimichi Saito (Hosei University)	527

6AM1-2: Evolutional Computation

Date: March 6, 09:00–10:30 Room: Waikiki Ballroom Salon II Chair: Michiharu Maeda (Fukuoka Institute of Technology)

6AM1-2-1Fundamental Characteristic of Deterministic Discrete Hysteresis PSO531Kenya Jin'no (Nippon Institute of Technology), Yu Shukuzawa (Nippon Institute of Technology), Takuya Shindo (Nippon Institute of Technology)531

6AM1-2-2 A Proposal of Flexible Hardware Architecture for Particle Swarm Optimization 535

Kui-Ting Chen (Waseda University), Jiaqi Zhang (Waseda University), Molin Jia (Waseda University), Takaaki Baba (Waseda University)

6AM1-2-3	Co-Evolutionary Strategy for Nonlinear Constrained System Based on Particle Swarm Op-	539
timization		007

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

6AM1-2-4A Basic Study on Quantum-Inspired Evolutionary Algorithm Using Integer Type Gene Cod-
ing Method Based on Quantum Bit Representation543

Ichiro Iimura (Prefectural University of Kumamoto), Yoshifumi Moriyama (Ariake National College of Technology), Shigeru Nakayama (Kagoshima University)

547

6AM1-2-5 Study on Adiabatic Quantum Computation in Deutsch Problem

Shigeru Nakayama (Kagoshima University)

6AM1-3: Image Recognition 1

Date: March 6, 09:00–10:30 Room: Waikiki Ballroom Salon III Chair: Yohei Takeuchi (Tokushima University)

6AM1-3-1 Show-Through Cancellation in Scanned Documents Using Multi-Level Independent Com-551 ponent Analysis

Mikio Oda (Kumamoto National College of Technology), Hiromi Miyajima (Kagoshima University)

555 6AM1-3-2 A Proposal of Interactive Segmentation Method for Touching Characters

Tsukasa Masuhara (Kyushu Institute of Technology), Hideaki Kawano (Kyushu Institute of Technology), Hideaki Orii (Kyushu Institute of Technology), Norikazu Ikoma (Kyushu Institute of Technology), Hiroshi Maeda (Kyushu Institute of Technology)

6AM1-3-3 Human Action Recognition with Optical Flow and Space-Time Patch 559

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

6AM1-3-4 Development of View Magnification Interface by Using Wearable Cameras for Weak Eye-563 sight People

Hideaki Kawano (Kyushu Institute of Technology), Masafumi Aoki (Kyushu Institute of Technology), Hideaki Orii (Kyushu Institute of Technology), Hiroshi Maeda (Kyushu Institute of Technology), Norikazu Ikoma (Kyushu Institute of Technology)

567 6AM1-3-5 Recognition License Plate in Degraded Images Using Pseudo Degraded Numbers

Atsushi Fujioka (Ritsumeikan University), Kentaro Aoki (Ritsumeikan University), Yohei Fukumizu (Ritsumeikan University), Hironori Yamauchi (Ritsumeikan University)

6AM1-4: Communication Systems 1

Date: March 6, 09:00-10:30 Room: Milo III Chair: Molin Jia (Waseda University)

6AM1-4-1 An Analysis of a Non-Coherent Delay-Locked Loop Under Multipath Fading Channels Keisuke Nagata (Hiroshima City University), Hisato Fujisaka (Hiroshima City University), Takeshi Kamio (Hiroshima City University), Kazuhisa Haeiwa (Hiroshima City University) 575 6AM1-4-2 **Optimal Sensor Selection for Single-trial P300 Brain-Computer Interface** Keisuke Tawada (Keio University), Yasue Mitsukura (Keio University) 6AM1-4-3 Consideration of Channel Capacity Guaranteed on MIMO Communication with Array 579 **Antenna Placed on Spherical Surface** Tetsuya Hikida (Tokushima University), Takahiro Oie (Tokushima University) 583 6AM1-4-4 P2P Streaming Method with Effective Bandwidth Usage Masaki Hanada (Tokyo University of Information Sciences), Hidehiro Kanemitsu (Waseda University) 6AM1-4-5 **Fundamental Study on EEG Analysis for Safety Driving Support System** 587

571

Kazuya Yaegashi (The University of Tokushima), Momoyo Ito (The University of Tokushima), Koichiro Mori (The University of Tokushima), Kazuhito Sato (Akita Prefectural University), Koji Kashihara (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

6AM2-1: Bifurcation

Date: March 6, 10:50-12:20 Room: Waikiki Ballroom Salon I Chair: Kyohei Kamiyama (Meiji University) 6AM2-1-1 Laboratory Experiment of Mixed-Mode Oscillations in a Weakly Driven Bonhoeffer-van 591 der Pol Oscillator Yuto Saito (Chiba Institute of Technology), Kuniyasu Shimizu (Chiba Institute of Technology), Munehisa Sekikawa (The University of Tokyo), Naohiko Inaba (Meiji University), Yutaka Haga (Chiba Institute of Technology) 6AM2-1-2 Effect Analysis of the Switching Delay in the Chaotic Attractor Observed in a Simple Inter-595 rupted Circuit Akihito Matsuo (Oita University), Hiroyuki Asahara (Oita University), Takuji Kousaka (Oita University) 6AM2-1-3 Bifurcation and Synchronization Phenomena of Coupled Nagumo-Sato Models 599 Kazutoshi Kinoshita (Tokushima University), Tetsushi Ueta (Tokushima University), Jun'ichi Imura (Tokyo Institute of Technology), Kazuyuki Aihara (The University of Tokyo) 6AM2-1-4 Coexistence Phenomenon Observed in Coupled Chua's Circuits Involving Parameter Vary-603 ing Hironori Kumeno (Tokushima University), Daniele Fournier-Prunaret (Toulouse University), Yoshifumi Nishio (Tokushima University) 6AM2-1-5 Computation of Unstable Periodic Points Embedded in a Horseshoe Map 607 Takaya Nakanishi (Tokushima University), Tetsushi Ueta (Tokushima University), Hiroshi Kawakami (Japan Science and Technology Agency), Jun'ichi Imura (Tokyo Institute of Technology), Kazuyuki Aihara (The University of Tokyo)

6AM2-2: Detection

Date: March 6, 10:50-12:30 Room: Waikiki Ballroom Salon II Chair: Takahiro Kitajima (Tokushima University)

6AM2-2-1 Study on Detectability of Signals by Utilizing Differences in Their Amplitude Modulation 611

Yuta Yano (Japan Advanced Institute of Science and Technology), Ryota Miyauchi (Japan Advanced Institute of Science and Technology), Masashi Unoki (Japan Advanced Institute of Science and Technology), Masato Akagi (Japan Advanced Institute of Science and Technology)

6AM2-2-2 Fingerprints Feature Extraction for Human Recognition Based on Bifurcation Points Using 615 **Genetic Algorithm**

Stephen Karungaru (The University of Tokushima), Kenji Terada (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

6AM2-2-3 Detection of Abandoned Objects in Public Facilities

Fumitoshi Taoka (The University of Tokushima), Momoyo Ito (The University of Tokushima), Koji Kashihara (The University of Tokushima), Minoru Fukumi (The University of Tokushima)

6AM2-2-4 Employing Short- and Long-Term Tracker for Detection and Tracking of Multiple Moving 623 **Objects**

Jun Nakasono (The University of Electro-Communications), Wataru Mitsuhashi (The University of Electro-Communications)

Masahiro Tanaka (Konan University), Hirofumi Kaku (Konan University)

6AM2-3: Image Recognition 2

Date: March 6, 10:50–12:30 Room: Waikiki Ballroom Salon III Chair: Tsuyoshi Otake (Tamagawa University)

6AM2-3-1 Integrated Multimodal Information for Detection of Unknown Objects and Unknown Names 631

Yuko Ozasa (Kobe University), Naoto Iwahashi (National Institute of Information and Communications Technology), Tetsuya Takiguchi (Kobe University), Yasuo Ariki (Kobe University), Mikio Nakano (Honda Research Institute)

 6AM2-3-2
 Speaker Dependent Word Lip Reading Using Code Sequence of Mouth Shape from Utter 635

 ance Scene
 635

Yuki Sugata (Keio University), Nozomu Hamada (Keio University)

6AM2-3-3Expression Recognition Using Local Gabor Directional Pattern Histogram Sequence639(LGDPHS)

Atsushi Higashi (Ritsumeikan University), Yohei Fukumizu (Ritsumeikan University), Hironori Yamauchi (Ritsumeikan University)

6AM2-3-4Tired State Recognition During Sports Using Image Processing643

Stephen Karungaru (The University of Tokushima), Takuya Higashidani (The University of Tokushima), Kenji Terada (The University of Tokushima)

6AM2-4: Communication Systems 2

Date: March 6, 10:50–12:30 Room: Milo III Chair: Shintaro Arai (Kagawa National College of Technology)

6AM2-4-1 Harmonics Estimation for Reducing Return Current Noise in Automatic Train Control Sys-	647
tems	017
Daijiro Shimizu (Saitama University), Tetsuya Shimamura (Saitama University), Takuya Wakutsu (The Nippon Signal CLTD.), Atsushi Sugawara (The Nippon Signal Co., LTD.)	Co.,
6AM2-4-2 Fractional N Frequency Synthesizer Using Accumulator-Type Frequency Detector	651
Yu Yamasumi (The University of Tokushima), Takahiro Oie (The University of Tokushima)	
6AM2-4-3 A Joint Timing and Frequency Synchronization with Preamble-Aided Scheme for OFDM Systems	655
Cheng Zhang (Waseda University), Kui-Ting Chen (Waseda University), Molin Jia (Waseda University), Takaaki B (Waseda University)	₿aba
6AM2-4-4 A Peer Grouping Policy for Processor Utilization in a Peer-to-Peer Grid	659

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

6AM2-4-5 System Construction of Data Collection Assistance for Shelter Information of Tsunami **Evacuation Activity**

Takanori Sakurai (Shikoku University), Satoshi Togawa (Shikoku University), Kazuhide Kanenishi (The University of Tokushima)

6PM1-1: Coupled Oscillators

Date: March 6, 13:20-14:50 Room: Waikiki Ballroom Salon I Chair: Kuniyasu Shimizu (Chiba Institute of Technology)

6PM1-1-1 Synchronization in Inhibitory Coupled Morris-Lecar Neurons 667

Masaya Hayashi (Kagawa University), Hiroyuki Kitajima (Kagawa University)

6PM1-1-2 Bifurcation of Quasi-Periodic Oscillation in Mutually-Coupled Hard Type Oscillators: 671 Asymmetrical Case

Kyohei Kamiyama (Meiji University), Motomasa Komuro (Teikyo University of Science), Tetsuro Endo (Meiji University)

6PM1-1-3 **Bifurcation Phenomena of a Light Coupled Oscillator with a Clock Pulse Input** 675

Daisuke Ito (Tokushima University), Takaya Nakanishi (Tokushima University), Akinori Tsuji (Tokushima University), Tetsushi Ueta (Tokushima University), Hiroshi Kawakami (Japan Science and Technology Agency)

6PM1-1-4 Frustrated Synchronization in Coupled Oscillator Chains with Unbalanced Parametric Dis-679 tribution

Kosuke Matsumura (Tokushima University), Takahiro Nagai (Tokushima University), Hironori Kumeno (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

6PM1-1-5 Study on the Speech Synthesis with Vocal-Cords Fluctuation Using Multi-Oscillators 683

Takaaki Kondo (Meiji University), Yuki Naniwa (Meiji University), Kyohei Kamiyama (Meiji University), Tomohisa Okawa (Meiji University), Shun Kadoi (Meiji University), Hiroyuki Kamata (Meiji University)

6PM1-2: Adaptive Systems

Date: March 6, 13:20-14:50 Room: Waikiki Ballroom Salon II Chair: Takashi Yasuno (Tokushima University)

6PM1-2-1 Feedforward Active Noise Control Systems with Controlled Injection of Probe Noise for 687 **Secondary Path Modeling**

Akihisa Oishi (The University of Electro-Communications), Muhammad Akhtar (The University of Electro-Communications), Wataru Mitsuhashi (The University of Electro-Communications)

6PM1-2-2 Modified-FxLMS Algorithm-Based Active Noise Control Systems with Reduced Complexity 691 and Improved Noise-Reduction-Performance

Shakeel Ahmed (The University of Electro-Communications), Muhammad Akhtar (The University of Electro-Communications), Wataru Mitsuhashi (The University of Electro-Communications)

6PM1-2-3 Position Control of Tendon-Driven Joint Using Adaptive Two-Degree-of-Freedom Control 695 System

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

6PM1-2-4 A Study of Constructing Active Noise Control System

Koji Hamada (Hiroshima City University), Shunsuke Ishimitsu (Hiroshima City University), Takehiro Ueganiwa (Hiroshima City University), Keisuke Namekawa (Suzuki Moter Corporation), Toshihisa Takagi (Suzuki Moter Corporation), Kazuki Yoshida (Suzuki Moter Corporation), Kenta Suzuki (Suzuki Moter Corporation), Takanori Chino (Suzuki Moter Corporation)

6PM1-3: [Special Session] Medical Images

Date: March 6, 13:20–14:50 Room: Waikiki Ballroom Salon III Chair: Toshiya Nakaguchi (Chiba Uniersity)

6PM1-3-1 Ultrasound Assisted Diagnosis and Surgery for Liver Diseases	702
Tadashi Yamaguchi (Chiba University), Satoki Zenbutsu (Chiba University)	
6PM1-3-2 Estimating Oxygen Saturation of Decubitus from its Color Spectrum	706
Satoshi Yamamoto (Keio University), Shumpei Watanabe (Chiba University), Tetsuo Akiba (AKIBA Clinic of Tradi Me), Norimichi Tsumura (Chiba University), Keiko Ogawa-Ochiai (Kanazawa University Hospital)	tional
6PM1-3-3 Development of AR-based ICG Fluorescence Imaging System	708
Toshiya Nakaguchi (Chiba University), Taku Suzuki (Chiba University), Seiji Ohtsubo (Kushiro Rosai Hospital), H Hayashi (Chiba University), Mitsuo Kusano (Kushiro Rosai Hospital)	Iideki
6PM1-3-4 Ensemble Learning in the Systems of Neural Networks for Detection of Abnormal Shadows from X-ray Images of Lungs	712
Takahiro Sasaki (Tottori University), Kentaro Kinoshita (Tottori University), Satoru Kishida (Tottori University), Yosh Hirata (Tottori University Hospital), Seigo Yamada (Tottori University Hospital)	1iharu

6PM1-4: Filter

Date: March 6, 13:20–14:50 Room: Milo III Chair: Hiroyuki Yashima (Tokyo University of Science)

6PM1-4-1Efficient Phase Optimization for Sounds with Condenced Energy DensityNobuhiro Sunada (The University of Tokyo), Shinya Shimizu (The University of Tokyo), Keikichi Hirose (The University of Tokyo), Nobuaki Minematsu (The University of Tokyo)	716 sity of
6PM1-4-2 Musical Performance with Intermittent Chaos Susumu Miyazaki (Sophia University), Masatoshi Sato (Sophia University), Mamoru Tanaka (Sophia University)	720
6PM1-4-3 A Flexible Control of Adaptive FIR Filter with Particle Swarm Optimization Molin Jia (Waseda University), Huijiao Dong (Waseda University), Darong Chen (Waseda University), Kui-Ting	724 Chen

(Waseda University), Takaaki Baba (Waseda University)

6PM1-	4-4	Low Cos	t Hardware	Design	for Multi-D	imension Pa	rticle Swa	rm Op	otimizatio	on		728
Huijiao	Dong	(Waseda	University),	Molin .	Jia (Waseda	University),	Kui-Ting	Chen	(Waseda	University),	Takaaki	Baba

6PM2-1: Complex Systems

Date: March 6, 15:10–16:40 Room: Waikiki Ballroom Salon I Chair: Kenya Jin'no (Nippon Institute of Technology)

GPM2-1-1 Time Development of Ring-Type CA from Which a Rule Number is Different at Each Space	732
Takayoshi Suzuki (Hosei University), Toshimichi Saito (Hosei University)	
6PM2-1-2 Several Spatio-Temporal Phase Patterns in Coupled Chaotic Maps with Delays	736
Hiroyuki Kowa (Konan University), Masahiro Wada (Konan University)	
6PM2-1-3 Properties of Small-World Networks with Vertex Reduction	740
Koji Uchida (Fukuoka Institute of Technology), Michiharu Maeda (Fukuoka Institute of Technology)	
6PM2-1-4 Stock Portfolio Management with Nonlinear Time Series Prediction	744
Satoshi Inose (Ibaraki University), Tomoya Suzuki (Ibaraki University)	
6PM2-1-5 Evaluating the Risk of Nonlinear Prediction with the Bagging Algorithm	748
Kazuya Nakata (Ibaraki University), Tomoya Suzuki (Ibaraki University)	

6PM2-2: Estimation

Date: March 6, 15:10–16:40 Room: Waikiki Ballroom Salon II Chair: Tetsuya Shimamura (Saitama University)

6PM2-2-1 On a Nonlinear Filter via Formal Linearization Based on Chebyshev Interpolation	752
Kazuo Komatsu (Kumamoto National College of Technology), Hitoshi Takata (Kagoshima University)	
6PM2-2-2 Stressed State Estimation Based on Photoplethysmogram Dynamics	756
Ying Li (Kyushu Institute of Technology), Keiichi Horio (Kyushu Institute of Technology)	
6PM2-2-3 Wind Speed Prediction Method Using Complex-Valued Neural Network Based on Wind Speed Frequency Spectrum	760
Naoya Ikeda (Tokushima University), Takashi Yasuno (Tokushima University), Takahiro Kitajima (Tokushima Univers	sity)
6PM2-2-4 Multistage-Type Prediction System of Solar Radiation Using Simplified Fuzzy Reasoning Based on Weather Forecast and MSM-GPV	764
Kazuki Satou (Tokushima University), Takashi Yasuno (Tokushima University), Akinobu Kuwahara (Tokushima University)	ersity)
6PM2-2-5 Source Localization for a Spherical Acoustic Wave Using Matrix Pencil Method	768
Ichiro Shudo (The University of Electro-Communications), Wataru Mitsuhashi	tions)

6PM2-3: Neural Network Applications

Date: March 6, 15:10–16:40 Room: Waikiki Ballroom Salon III Chair: Takayuki Watanabe (University of Shizuoka)

6PM2-3-1 Dynamical AD Converter by the FitzHugh-Nagumo Model in Cellular Neural Network	772
Daiki Goto (Sophia University), Mamoru Tanaka (Sophia University)	
6PM2-3-2 A Leaky Integrate-and-Fire Neuron Cellular Neural Network by Second Order Noise Shap- ing	776
Takuma Yamamoto (Sophia University), Hisashi Aomori (Sophia University), Mamoru Tanaka (Sophia University)	
6PM2-3-3 Image Edge Detection Algorithm with a Single Grid System of Coupled FitzHugh-Nagumo Elements	780
Atsushi Nomura (Yamaguchi University), Makoto Ichikawa (Chiba University), Koichi Okada (Yamaguchi University), sunari Sakurai (Chiba University), Yoshiki Mizukami (Yamaguchi University)	Tat-
6PM2-3-4 Construction of Neural Network Systems for Fingerprint Authentication	784
Akihiro Tanaka (Tottori University), Kentaro Kinoshita (Tottori University), Satoru Kishida (Tottori University)	
6PM2-3-5 An Implementation of Pixel Level Snake to Cellular Hardware Platform	788

Yuji Tsuji (Ritsumeikan University), Tomohiro Fujita (Ritsumeikan University), Takao Matsui (Ritsumeikan University), Takeshi Kumaki (Ritsumeikan University), Mamoru Nakanishi (NTT Microsystem Integrations Laboratories), Takeshi Ogura (Ritsumeikan University)

6PM2-4: Optical Communication

Date: March 6, 15:10–16:40 Room: Milo III Chair: Takahiro Oie (Tokushima University)

6PM2-4-1Study on BER Performance of Atmospheric Optical CDMA System Using Optical ZCZ792Code

Takahiro Matsumoto (Yamaguchi University), Mika Inoue (Yamaguchi University), Hideyuki Torii (Kanagawa Institute of Technology), Shinya Matsufuji (Yamaguchi University)

6PM2-4-2Optical PPM CDMA Using Dual Encoding with Different Optical Power796

Shusaku Hata (Tokyo Universitu of Science), Yusuke Takatori (Tokyo Universitu of Science), Hiroyuki Yashima (Tokyo Universitu of Science)

GPM2-4-3Optical CDMA System Using Extended Chaotic Binary Codes with Equal Weight Orthogonal Modulation800

Hirofumi Terao (Tokyo University of Science), Yusuke Takatori (Tokyo University of Science), Hiroyuki Yashima (Tokyo University of Science)

6PM2-4-4 A Concatenated Coding Scheme for Reducing the Decoding Errors

Fumiya Mitani (Tokushima University), Hitoshi Tokushige (Tokushima University), Jun Asatani (Okayama University of Science)

Author Index

A

Adachi, Masaharu: 277(5AM1-4-1) Adachi, Taku: 229(5AM1-1-4) Ahmed, Shakeel: 691(6PM1-2-2) 13(4AM1 - 1 - 4), Aihara, Kazuyuki: 5(4AM1 - 1 - 2), **301**(5AM2-1-2), 129(4PM1 - 4 - 2). 453(5PM2-1-3), 599(6AM2-1-3), 607(6AM2-1-5) Akagi, Masato: 333(5AM2 - 2 - 5), 401(5PM1-2-4), 611(6AM2-2-1) Akhtar, Muhammad: 687(6PM1-2-1), 691(6PM1-2-2) Akiba, Tetsuo: 706(6PM1-3-2) Aoki, Kentaro: 567(6AM1-3-5) Aoki, Masafumi: 563(6AM1-3-4) Aomori, Hisashi: 519(6AM1-1-2), 776(6PM2-3-2) Arai, Shintaro: 60(4AM1-4-3), 64(4AM1-4-4) Arakaki, Kazuyasu: 116(4PM1-3-3) Aratani, Yuki: 221(5AM1-1-2) Ariki, Yasuo: 112(4PM1-3-2), 631(6AM2-3-1) Ariwardhani, Narpendyah: 170(4PM2-2-4) Asahara, Hiroyuki: 138(4PM2-1-1), 457(5PM2-1-4), **595**(6AM2-1-2) Asai, Tetsuya: 9(4AM1 - 1 - 3), 229(5AM1 - 1 - 4), 357(5AM2-4-2) Asatani, Jun: 804(6PM2-4-4)

B

Baba, Takaaki: 202(4PM2-4-2), 535(6AM1-2-2), 539(6AM1-2-3), 655(6AM2-4-3), 724(6PM1-4-3), 728(6PM1-4-4) Bando, Takafumi: 417(5PM1-3-3) Booka, Masayuki: 96(4PM1-2-3)

С

Chen, Darong: 539(6AM1-2-3), 724(6PM1-4-3)Chen, Kui-Ting: 202(4PM2-4-2), 535(6AM1-2-2), 539(6AM1-2-3), 655(6AM2-4-3), 724(6PM1-4-3), 728(6PM1-4-4)Chiba, Kei: 519(6AM1-1-2)Chijiiwa, Keigo: 253(5AM1-2-5)Chino, Takanori: 699(6PM1-2-4)Chou, Hirotomi: 45(4AM1-3-3)

D

Dang, Jianwu: 393(5PM1-2-2), 497(5PM2-3-4) Dong, Huijiao: 724(6PM1-4-3), 728(6PM1-4-4) Dou, Zhang: 265(5AM1-3-3)

Ε

Endo, Shuichiro: 249(5AM1-2-4) Endo, Tetsuro: 671(6PM1-1-2) Enosawa, Yoko: 465(5PM2-2-1)

F

Fournier-Prunaret, Daniele: 603(6AM2-1-4) Fu, Huan: 349(5AM2-3-4) Fuji, Taiki: 437(5PM1-4-4) Fujii, Kazuya: 393(5PM1-2-2) Fujimoto, Ken'ichi: 485(5PM2-3-1), 489(5PM2-3-2) Fujino, Takeshi: 182(4PM2-3-2) Fujioka, Atsushi: 567(6AM1-3-5) Fujioka, Saori: 72(4PM1-1-2) Fujisaka, Hisato: 217(5AM1-1-1), 571(6AM1-4-1) Fujisawa, Shoichiro: 96(4PM1-2-3), 269(5AM1-3-4) Fujita, Tomohiro: 100(4PM1-2-4), 225(5AM1-1-3), 788(6PM2-3-5) 68(4PM1-1-1), Fujiwara, Naoki: 425(5PM1-4-1) 353(5AM2-4-1), Fukai, Hironobu: 341(5AM2-3-2) Fukumi, Minoru: 49(4 AM 1 - 3 - 4), 104(4PM1-2-5), 158(4PM2-2-1), 281(5AM1-4-2), 285(5AM1-4-3), 293(5AM1-4-5), **433**(5PM1-4-3), 587(6AM1-4-5), 615(6AM2-2-2), 619(6AM2-2-3) Fukumizu, Yohei: 45(4AM1-3-3), 108(4PM1-3-1), 429(5PM1-4-2), 493(5PM2-3-3), 567(6AM1-3-5), 639(6AM2-3-3) Fukumori, Takahiro: 241(5AM1-2-2) Fukushima, Hirotaka: 453(5PM2-1-3) Funabashi, Takahide: 433(5PM1-4-3) Funase, Arao: 289(5AM1-4-4)

G

Gondo, Shizuka: 523(6AM1-1-3) Gong, Xiyuan: 353(5AM2-4-1) Gonzalez-Carabarin, Lizeth: 357(5AM2-4-2) Goto, Daiki: 772(6PM2-3-1)

Η

Hachino, Tomohiro: 25(4AM1-2-2) Haeiwa, Kazuhisa: 217(5AM1-1-1), 221(5AM1-1-2), 571(6AM1-4-1) Haga, Yutaka: 591(6AM2-1-1) Hamada, Koji: 699(6PM1-2-4) Hamada, Nozomu: 421(5PM1-3-4), 635(6AM2-3-2) Hanada, Masaki: **198**(4PM2-4-1), **583**(6AM1-4-4), 659(6AM2 - 4 - 4)Hara, Naoto: 477(5PM2-2-4) Haraguchi, Ei: 233(5AM1-1-5) Hasegawa, Mikio: 129(4PM1-4-2), 130(4PM1-4-3), 134(4PM1-4-4) Hashimoto, Naoyuki: 206(4PM2-4-3) Hashimoto, Takatsugu: 437(5PM1-4-4) Hashiodani, Kenji: 429(5PM1-4-2), 493(5PM2-3-3) Hashizume, Masaki: 233(5AM1-1-5), 445(5PM2-1-1), 449(5PM2-1-2) Hata, Shusaku: 796(6PM2-4-2) Hattori, Asobu: 249(5AM1-2-4) Hayashi, Hatsuo: 503(5PM2-4-2) Hayashi, Hideki: 708(6PM1-3-3) Hayashi, Masaya: 667(6PM1-1-1) He, Yongjian: 349(5AM2-3-4) Higashi, Atsushi: 639(6AM2-3-3) Higashidani, Takuya: 643(6AM2-3-4) Hikida, Tetsuya: 579(6AM1-4-3) Hino, Yoshiomi: 25(4AM1-2-2) Hiramatsu, Yuki: 45(4AM1-3-3) Hirata, Yoshiharu: 712(6PM1-3-4) Hirose, Keikichi: 166(4PM2-2-3), 253(5AM1-2-5), 389(5PM1-2-1), 716(6PM1-4-1) Hirose, Satoshi: 421(5PM1-3-4) Honda, Ikuji: 116(4PM1-3-3), 118(4PM1-3-4) Honda, Syohei: 373(5PM1-1-1) Hori, Maiya: 361(5AM2-4-3) Horie, Minoru: 493(5PM2-3-3) Horio, Keiichi: 756(6PM2-2-2) Horio, Yoshihiko: **301**(5AM2-1-2), 13(4 AM 1 - 1 - 4), 453(5PM2-1-3) Hoshiida, Atsushi: 21(4AM1-2-1) Hosokawa, Yasuteru: 76(4PM1-1-3) Hou, Ming: 261(5AM1-3-2) Hu, Chengwei: 349(5AM2-3-4)

Ι

Ichikawa, Makoto: 780(6PM2-3-3) Ichiki, Akihisa: 52(4AM1-4-1), 56(4AM1-4-2) Igarashi, Masaki: 186(4PM2-3-3) **Iida**, **Nozomu**: **249**(5AM1-2-4) **Iimura**, Ichiro: 543(6AM1-2-4) Ikami, Yuki: 293(5AM1-4-5) Ikebe, Masayuki: 186(4PM2-3-3) Ikeda, Masanori: 13(4AM1-1-4) Ikeda, Naoya: 760(6PM2-2-3) Ikefuji, Daisuke: 245(5AM1-2-3) Ikenaga, Takeshi: 413(5PM1-3-2) Ikoma, Norikazu: 555(6AM1-3-2), 563(6AM1-3-4) Ikuta, Chihiro: 365(5AM2-4-4), 369(5AM2-4-5), 441(5PM1-4-5) Imai, Satoshi: 1(4AM1-1-1) Imamura, Shun-ichi: 249(5AM1-2-4) Imura, Jun'ichi: 599(6AM2-1-3), 607(6AM2-1-5) Inaba, Naohiko: 591(6AM2-1-1)

Inose, Satoshi: 744(6PM2-1-4) Inoue, Mika: 792(6PM2-4-1) Iribe, Yurie: 170(4PM2-2-4) Ishida, Atsushi: 118(4PM1-3-4) Ishikura, Naoyuki: 417(5PM1-3-3) Ishimitsu, Shunsuke: 699(6PM1-2-4) Ishimura, Kazuyoshi: 9(4AM1-1-3) Itaya, Shuhei: 182(4PM2-3-2) Ito, Daisuke: 675(6PM1-1-3) Ito, Momoyo: 49(4 AM 1 - 3 - 4), 104(4PM1-2-5), 158(4PM2-2-1), 281(5AM1 - 4 - 2), 285(5AM1 - 4 - 3), 293(5AM1-4-5), 433(5PM1-4-3), 587(6AM1 - 4 - 5). 619(6AM2-2-3) Ito, Shin-ichi: 96(4PM1-2-3), 269(5AM1-3-4) Itou, Katunobu: 397(5PM1-2-3) Iwabu, Koichi: 37(4AM1-3-1), 41(4AM1-3-2) Iwahashi, Naoto: 631(6AM2-3-1) Iwai, Yoshio: 361(5AM2-4-3) Izumida, Tsuyoshi: 401(5PM1-2-4)

J

```
Jia, Molin: 202(4PM2-4-2), 535(6AM1-2-2),

539(6AM1-2-3), 655(6AM2-4-3),

724(6PM1-4-3), 728(6PM1-4-4)

Jin'no, Kenya: 473(5PM2-2-3), 531(6AM1-2-1)

Jindai, Mitsuru: 337(5AM2-3-1)

Joichi, Saori: 178(4PM2-3-1)
```

K

Kadoi, Shun: 683(6PM1-1-5) Kai, Tsunenobu: 253(5AM1-2-5) Kakimoto, Taro: 154(4PM2-1-5) Kaku, Hirofumi: 627(6AM2-2-5) Kamata, Hiroyuki: 373(5PM1-1-1), 377(5PM1-1-2), 683(6PM1-1-5) Kameshima, Hideto: 116(4PM1-3-3) Kamijo, Jun: 527(6AM1-1-4) Kamio, Saori: 337(5AM2-3-1) Kamio, Takeshi: 217(5AM1-1-1), 221(5AM1-1-2), 571(6AM1-4-1) Kamiyama, Kyohei: 671(6PM1-1-2), 683(6PM1-1-5) Kanai, Yasuaki: 237(5AM1-2-1) Kanemitsu, Hidehiro: 583(6AM1-4-4), 659(6AM2-4-4) Kanenishi, Kazuhide: 663(6AM2-4-5) Karungaru, Stephen: 615(6AM2-2-2), 643(6AM2-3-4) Kasai, Seiya: 52(4AM1-4-1) 104(4PM1-2-5), Kashihara, Koji: 49(4AM1 - 3 - 4), 158(4PM2-2-1), 281(5AM1-4-2), 285(5AM1-4-3), 293(5AM1-4-5), **433**(5PM1-4-3), 587(6AM1-4-5), 619(6AM2-2-3) Katayama, Touma: 499(5PM2-4-1) Kato, Tomohiro: 130(4PM1-4-3) Kato, Yoshihiro: 515(6AM1-1-1) Katsurada, Kouichi: 170(4PM2-2-4) Kawakami, Hiroshi: 607(6AM2-1-5), 675(6PM1-1-3) Kawamoto, Shin'ichi: 497(5PM2-3-4)

Kawanishi, Yoshiaki: 373(5PM1-1-1), 377(5PM1-1-2) Kawano, Hideaki: 190(4PM2-3-4), 555(6AM1-3-2), 563(6AM1-3-4) Kijima, Masahiro: 84(4PM1-1-5) Kim, MooWan: 198(4PM2-4-1) Kina, Tatsuki: 325(5AM2-2-3) Kinoshita, Kazutoshi: 599(6AM2-1-3) Kinoshita, Kentaro: 425(5PM1-4-1), 712(6PM1-3-4), 784(6PM2-3-4) Kishida, Satoru: 425(5PM1-4-1), 712(6PM1-3-4), 784(6PM2-3-4) **Kitajima, Hiroyuki:** 206(4PM2-4-3), 667(6PM1-1-1) Kitajima, Takahiro: 29(4AM1-2-3), 760(6PM2-2-3) Kitamura, Tadashi: 289(5AM1-4-4) Kitano, Yoshinori: 273(5AM1-3-5) Kobori, Yoshiyuki: 381(5PM1-1-3) Kohda, Tohru: 301(5AM2-1-2) Komatsu, Kazuo: 25(4AM1-2-2), 752(6PM2-2-1) Komuro, Motomasa: 671(6PM1-1-2) Komuro, Nobuyoshi: 125(4PM1-4-1) Kondo, Syohei: 233(5AM1-1-5) Kondo, Takaaki: 683(6PM1-1-5) Kosoba, Takafumi: 305(5AM2-1-3) Kousaka, Takuji: 5(4AM1 - 1 - 2), 138(4PM2-1-1). 457(5PM2-1-4), 595(6AM2-1-2) Kowa, Hiroyuki: 736(6PM2-1-2) Kuji, Naoaki: 465(5PM2-2-1) 100(4PM1-2-4), 182(4PM2-3-2), Kumaki, Takeshi: 788(6PM2-3-5) Kumeno, Hironori: 17(4AM1-1-5), 603(6AM2-1-4), 679(6PM1-1-4) Kuramoto, Nobuhisa: 269(5AM1-3-4) Kurata, Kana: 441(5PM1-4-5) Kurimoto, Sota: 321(5AM2-2-2) Kurita, Hiroshi: 130(4PM1-4-3) Kuriyama, Syuhei: 373(5PM1-1-1) Kuroiwa, Shingo: 150(4PM2-1-4), 158(4PM2-2-1) Kurumi, Yoshimasa: 45(4AM1-3-3), 429(5PM1-4-2) Kusano, Mitsuo: 708(6PM1-3-3) Kuwahara, Akinobu: 33(4AM1-2-4), 84(4PM1-1-5), 764(6PM2-2-4)

L

Li, Ying: 756(6PM2-2-2) Liu, Yuehu: 257(5AM1-3-1), 261(5AM1-3-2)

Μ

Maeda, Hiroshi: 190(4PM2-3-4), 555(6AM1-3-2), 563(6AM1-3-4) Maeda, Michiharu: 121(4PM1-3-5), 740(6PM2-1-3) Makimoto, Hiroyuki: 445(5PM2-1-1) Makishima, Masato: 121(4PM1-3-5) Manabe, Hiroyuki: 190(4PM2-3-4) Manabe, Katsuya: 233(5AM1-1-5) Masuhara, Tsukasa: 555(6AM1-3-2) Matsubara, Kayoko: 96(4PM1-2-3) Matsufuji, Shinya: 792(6PM2-4-1) Matsui, Takao: 788(6PM2-3-5) Matsumoto, Naoki: 182(4PM2-3-2) Matsumoto, Takaaki: 142(4PM2-1-2) Matsumoto, Takahiro: 210(4PM2-4-4), 792(6PM2-4-1) Matsumura, Kosuke: 679(6PM1-1-4) Matsumura, Toshie: 361(5AM2-4-3) Matsuno, Shoko: 92(4PM1-2-2) Matsuo, Akihito: 595(6AM2-1-2) Matsushita, Haruna: 146(4PM2-1-3), 465(5PM2-2-1), 481(5PM2-2-5) Matsuura, Masakazu: 68(4PM1-1-1) Minematsu, Nobuaki: 166(4PM2-2-3), 253(5AM1-2-5). 389(5PM1-2-1), 716(6PM1-4-1) Mitani, Fumiya: 804(6PM2-4-4) Mitsuhashi, Wataru: 178(4PM2-3-1), 623(6AM2-2-4), 687(6PM1-2-1), 691(6PM1-2-2), 768(6PM2-2-5) Mitsukura, Yasue: 265(5AM1-3-3), 341(5AM2-3-2), 437(5PM1-4-4), 575(6AM1-4-2) Miyajima, Hiromi: 25(4AM1-2-2), 551(6AM1-3-1) Miyamori, Shinya: 108(4PM1-3-1) Miyanaga, Yoshikazu: 174(4PM2-2-5), 329(5AM2-2-4) Miyauchi, Ryota: 611(6AM2-2-1) Miyazaki, Susumu: 720(6PM1-4-2) Mizukami, Yoshiki: 780(6PM2-3-3) Mizukoshi, Akihito: 249(5AM1-2-4) Mizuno, Akira: 186(4PM2-3-3) Mori, Kentaro: 158(4PM2-2-1) Mori, Koichiro: 587(6AM1-4-5) Morise, Masanori: 241(5AM1-2-2), 245(5AM1-2-3), 317(5AM2-2-1), 321(5AM2-2-2) Moriyama, Yoshifumi: 543(6AM1-2-4) Motohisa, Junichi: 186(4PM2-3-3) Motomura, Masato: 9(4AM1 - 1 - 3). 68(4PM1-1-1), 229(5AM1 - 1 - 4), 353(5AM2-4-1), 357(5AM2-4-2) Murakami, Kazutomo: 437(5PM1-4-4) Murakami, Yuma: 182(4PM2-3-2) Murasugi, Kentaro: 277(5AM1-4-1)

Ν

Nagai, Takahiro: 679(6PM1-1-4) Nagaregawa, Den: 49(4AM1-3-4) Nagashima, Tomoharu: 150(4PM2 - 1 - 4), 154(4PM2-1-5), 313(5AM2-1-5) Nagata, Keisuke: 217(5AM1-1-1), 571(6AM1-4-1) Nakaguchi, Toshiya: 708(6PM1-3-3) Nakai, Daisuke: 225(5AM1-1-3) Nakai, Masaki: 100(4PM1-2-4) Nakamatsu, Yukari: 112(4PM1-3-2) Nakamura, Kazufumi: 397(5PM1-2-3) Nakamura, Makoto: 210(4PM2-4-4) Nakamura, Mitsuhiro: 301(5AM2-1-2) Nakanishi, Mamoru: 409(5PM1-3-1), 788(6PM2-3-5) Nakanishi, Takaya: 607(6AM2-1-5), 675(6PM1-1-3) Nakano, Mikio: 631(6AM2-3-1) Nakao, Kei: 182(4PM2-3-2)

Nakasono, Jun: 623(6AM2-2-4) Nakata, Kazuya: 748(6PM2-1-5) Nakatani, Takeshi: 33(4AM1-2-4) Nakayama, Ariyoshi: 373(5PM1-1-1), 377(5PM1-1-2) Nakayama, Shigeru: 543(6AM1-2-4), 547(6AM1-2-5) Namekawa, Keisuke: 699(6PM1-2-4) Naniwa, Yuki: 683(6PM1-1-5) Natsume, Kiyohisa: 499(5PM2-4-1) Nawata, Masayoshi: 100(4PM1-2-4) Negishi, Yuna: 265(5AM1-3-3) Nishida, Masafumi: 162(4PM2-2-2) Nishigawa, Daisuke: 695(6PM1-2-3) Nishimoto, Takuya: 76(4PM1-1-3) Nishimura, Nana: 497(5PM2-3-4) Nishio, Yoshifumi: 17(4AM1-1-5), 60(4AM1 - 4 - 3), 72(4PM1-1-2), 76(4PM1 - 1 - 3), 257(5AM1-3-1), 273(5AM1-3-5), 345(5AM2-3-3), 349(5AM2-3-4), 365(5AM2-4-4), 369(5AM2-4-5), 441(5PM1-4-5), 477(5PM2-2-4), 481(5PM2-2-5), 515(6AM1-1-1), 603(6AM2-1-4), 679(6PM1-1-4) Nishiura, Takanobu: 241(5AM1-2-2), 245(5AM1-2-3), 317(5AM2-2-1), 321(5AM2-2-2) Nitta, Tsuneo: 170(4PM2-2-4) Nomura, Atsushi: 780(6PM2-3-3) Nosaka, Takuma: 214(4PM2-4-5) Nose, Kenta: 225(5AM1-1-3)

0

Oda, Mikio: 551(6AM1-3-1) Ogawa-Ochiai, Keiko: 706(6PM1-3-2) 100(4PM1-2-4), 182(4PM2-3-2), Ogura, Takeshi: 788(6PM2-3-5) Ohata, Kosuke: 198(4PM2-4-1) Ohtani, Natsumi: 281(5AM1-4-2) Ohtsubo, Seiji: 708(6PM1-3-3) Ohtubo, Yoshitaka: 507(5PM2-4-3) Oie, Takahiro: 579(6AM1-4-3), 651(6AM2-4-2) Oishi, Akihisa: 687(6PM1-2-1) Okada, Koichi: 780(6PM2-3-3) Okada, Yasuhiko: 449(5PM2-1-2) Okawa, Tomohisa: 683(6PM1-1-5) Oku, Hidehisa: 96(4PM1-2-3) **Omori, Yuichi:** 134(4PM1-4-4) **Ono, Kosuke:** 511(5PM2-4-4), 513(5PM2-4-5) **Ono, Yoshihiro:** 289(5AM1-4-4) Orii, Hideaki: 190(4PM2-3-4), 555(6AM1-3-2). 563(6AM1-3-4) Osawa, Masahiro: 182(4PM2-3-2) Otake, Tsuyoshi: 519(6AM1-1-2) Otsuka, Yousuke: 88(4PM1-2-1) **Oyama, Yojiro:** 421(5PM1-3-4) Ozaki, Shota: 60(4AM1-4-3) Ozasa, Yuko: 631(6AM2-3-1)

R

Rafii, Zarina: 409(5PM1-3-1)

S

Saito, Kazunori: 108(4PM1-3-1) 142(4PM2-1-2), Saito, Toshimichi: 1(4AM1-1-1), **297**(5AM2-1-1), 305(5AM2 - 1 - 3), 469(5PM2-2-2), 465(5PM2-2-1), 473(5PM2-2-3), 527(6AM1 - 1 - 4), 732(6PM2-1-1) Saito, Yuto: 591(6AM2-1-1) Sakai, Hiroshi: 493(5PM2-3-3) Sakata, Osamu: 249(5AM1-2-4) Sakata, Shiro: 125(4PM1-4-1) Sako, Shinji: 289(5AM1-4-4) Sakurai, Takanori: 663(6AM2-4-5) Sakurai, Tatsunari: 780(6PM2-3-3) Samura, Toshikazu: 503(5PM2-4-2) Sanada, Kousuke: 125(4PM1-4-1) Sano, Ryousuke: 473(5PM2-2-3) Sasaki, Takahiro: 712(6PM1-3-4) Sasaki, Yuuki: 333(5AM2-2-5) Sato, Katsuya: 96(4PM1-2-3), 269(5AM1-3-4) Sato, Kazuhito: 587(6AM1-4-5) Sato, Masatoshi: 214(4PM2-4-5), 381(5PM1-1-3), 385(5PM1-1-4), 720(6PM1-4-2) Sato, Taichi: 373(5PM1-1-1), 377(5PM1-1-2) Sato, Yukio: 116(4PM1-3-3), 118(4PM1-3-4) Satou, Kazuki: 764(6PM2-2-4) Sekikawa, Munehisa: 591(6AM2-1-1) 5(4AM1 - 1 - 2), Sekiya, Hiroo: 125(4PM1-4-1), 146(4PM2 - 1 - 3), 150(4PM2 - 1 - 4), 154(4PM2-1-5), 313(5AM2-1-5) Shima, Tomoya: 365(5AM2-4-4) Shimada, Ayana: 17(4AM1-1-5) Shimamoto, Takashi: 417(5PM1-3-3) Shimamura, Tetsuya: 325(5AM2-2-3), 647(6AM2-4-1) Shimizu, Daijiro: 647(6AM2-4-1) Shimizu, Kuniyasu: 591(6AM2-1-1) Shimizu, Shinya: 166(4PM2-2-3), 716(6PM1-4-1) Shimizu, Sho: 309(5AM2-1-4) Shimizu, Tadaaki: 361(5AM2-4-3) Shimizu, Yusho: 5(4AM1-1-2) Shimomura, Sho: 477(5PM2-2-4), 481(5PM2-2-5) Shimoyama, Sousuke: 186(4PM2-3-3) Shindo, Takuya: 473(5PM2-2-3), 531(6AM1-2-1) Shirai, Shota: 100(4PM1-2-4) Shirasaki, Yudai: 477(5PM2-2-4) Short, Greg: 389(5PM1-2-1) Shudo, Ichiro: 768(6PM2-2-5) Shukuzawa, Yu: 531(6AM1-2-1) Song, Tian: 417(5PM1-3-3) Su, Yuanqi: 257(5AM1-3-1) Suemitsu, Atsuo: 393(5PM1-2-2) Suetsugu, Tadashi: 150(4PM2-1-4) Sugata, Yuki: 635(6AM2-3-2) Sugawara, Atsushi: 647(6AM2-4-1) Sugibayashi, Yutaro: 321(5AM2-2-2) Sunada, Nobuhiro: 716(6PM1-4-1) Sunakawa, Kazuki: 469(5PM2-2-2) Suzuki, Kenta: 699(6PM1-2-4) Suzuki, Masayuki: 166(4PM2-2-3), 253(5AM1-2-5) Suzuki, Nobuhisa: 162(4PM2-2-2)

Suzuki, Takahiro: 413(5PM1-3-2) Suzuki, Takayoshi: 732(6PM2-1-1) Suzuki, Taku: 708(6PM1-3-3) Suzuki, Tomoya: 88(4PM1-2-1), 744(6PM2-1-4), 748(6PM2-1-5) Suzuki, Yutaka: 249(5AM1-2-4)

Т

Tadokoro, Yukihiro: 52(4AM1-4-1), 56(4AM1-4-2) Tahara, Jyunichiro: 21(4AM1-2-1) Takada, Shinichi: 429(5PM1-4-2), 493(5PM2-3-3) Takagi, Toshihisa: 699(6PM1-2-4) Takahashi, Aya: 297(5AM2-1-1) Takahashi, Haruhisa: 559(6AM1-3-3) Takahashi, Katsuya: 174(4PM2-2-5) Takahashi, Nobuaki: 519(6AM1-1-2) Takahashi, Wataru: 174(4PM2-2-5), 329(5AM2-2-4) Takao, Kouji: 437(5PM1-4-4) Takaoka, Kei: 437(5PM1-4-4) Takata, Hitoshi: 25(4AM1-2-2), 752(6PM2-2-1) Takatori, Yusuke: 796(6PM2-4-2), 800(6PM2-4-3) Takei, Kentaro: 417(5PM1-3-3) Takei, Syota: 194(4PM2-3-5) Takeshi, Kumaki: 409(5PM1-3-1) **Takeshi**, **Ogura**: **409**(5PM1-3-1) Takeuchi, Yohei: 104(4PM1-2-5), 281(5AM1-4-2),285(5AM1-4-3) Takigawa, Kiyoshi: 37(4AM1-3-1), 41(4AM1-3-2) Takiguchi, Tetsuya: 112(4PM1-3-2), 631(6AM2-3-1) Takimoto, Hironori: 337(5AM2-3-1) Tanaka, Akihiro: 425(5PM1-4-1), 784(6PM2-3-4) Tanaka, Daiki: 138(4PM2-1-1) Tanaka, Hiroya: 64(4AM1-4-4) Tanaka, Mamoru: 92(4PM1-2-2), 214(4PM2-4-5), **297**(5AM2-1-1), 309(5AM2 - 1 - 4), 381(5PM1-1-3), 385(5PM1-1-4), 519(6AM1 - 1 - 2), 523(6AM1-1-3), 527(6AM1 - 1 - 4), 720(6PM1-4-2), 772(6PM2-3-1), 776(6PM2-3-2) Tanaka, Masahiro: 627(6AM2-2-5) Tanaka, Tomoyuki: 162(4PM2-2-2) Tanaka, Yasuhiro: 465(5PM2-2-1) Tanda, Yuki: 80(4PM1-1-4), 405(5PM1-2-5) Tani, Tohru: 45(4AM1-3-3), 429(5PM1-4-2) Tanimoto, Sunao: 21(4AM1-2-1) Tanji, Yuichi: 146(4PM2-1-3) Taoka, Fumitoshi: 619(6AM2-2-3) Tasaki, Kenichi: 457(5PM2-1-4) Tateishi, Kiyoko: 489(5PM2-3-2) Tateno, Katsumi: 507(5PM2-4-3) Tawada, Keisuke: 575(6AM1-4-2) Terada, Kenji: 615(6AM2-2-2), 643(6AM2-3-4) Terao, Hirofumi: 800(6PM2-4-3) Togawa, Satoshi: 663(6AM2-4-5) Tokushige, Hitoshi: 804(6PM2-4-4) Tomohiro, Fujita: 409(5PM1-3-1) Torii, Hideyuki: 210(4PM2-4-4), 792(6PM2-4-1) Tsuge, Satoru: 158(4PM2-2-1) Tsuji, Akinori: 675(6PM1-1-3)

Tsuji, Yuji: 788(6PM2-3-5) Tsujikawa, Misaki: 317(5AM2-2-1) Tsumura, Norimichi: 706(6PM1-3-2)

U

Uchida, Koji: 740(6PM2-1-3) Ueda, Yasuhiro: 515(6AM1-1-1) Ueganiwa, Takehiro: 699(6PM1-2-4) 599(6AM2-1-3), Ueta, Tetsushi: 273(5AM1-3-5), 607(6AM2-1-5), 675(6PM1-1-3) Umeno, Ken: 129(4PM1-4-2) Unoki, Masashi: 237(5AM1-2-1), 611(6AM2-2-1) Uwate, Yoko: 17(4AM1-1-5), 72(4PM1-1-2), 369(5AM2 - 4 - 5), 365(5AM2-4-4), 441(5PM1-4-5), 477(5PM2-2-4), 481(5PM2-2-5), 515(6AM1-1-1), 679(6PM1-1-4)

W

Wada, Masahiro: 80(4PM1-1-4), 405(5PM1-2-5), 736(6PM2-1-2)
Wada, Shigeo: 194(4PM2-3-5)
Wagatsuma, Hiroaki: 511(5PM2-4-4), 513(5PM2-4-5)
Waki, Hayato: 249(5AM1-2-4)
Wakutsu, Takuya: 647(6AM2-4-1)
Wang, Fei: 345(5AM2-3-3), 349(5AM2-3-4)
Watanabe, Hirotaka: 373(5PM1-1-1), 377(5PM1-1-2)
Watanabe, Hisashi: 134(4PM1-4-4)
Watanabe, Shumpei: 706(6PM1-3-2)
Watanabe, Takayuki: 461(5PM2-1-5)
Wei, Xiuqin: 150(4PM2-1-4), 154(4PM2-1-5)

Х

Xin, Jingmin: 17(4AM1-1-5), 345(5AM2-3-3)

Y

Yaegashi, Kazuya: 587(6AM1-4-5) Yamada, Seigo: 712(6PM1-3-4) Yamaguchi, Tadashi: 702(6PM1-3-1) Yamaguchi, Yusaku: 485(5PM2-3-1) Yamamoto, Satoshi: 706(6PM1-3-2) Yamamoto, Seiichi: 162(4PM2-2-2) Yamamoto, Takuma: 776(6PM2-3-2) Yamamura, Yusuke: 285(5AM1-4-3) Yamanaka, Kenji: 33(4AM1-2-4) Yamashita, Yoichi: 241(5AM1-2-2) Yamasumi, Yu: 651(6AM2-4-2) Yamauchi, Hironori: 45(4AM1-3-3), 108(4PM1-3-1), 429(5PM1-4-2), 493(5PM2-3-3), 567(6AM1-3-5), 639(6AM2-3-3) Yamauchi, Hitoshi: 337(5AM2-3-1) Yamauchi, Masayuki: 309(5AM2-1-4) Yamazaki, Tomoya: 198(4PM2-4-1) Yamazato, Takaya: 60(4AM1-4-3), 64(4AM1-4-4) Yang, Guoan: 273(5AM1-3-5), 369(5AM2-4-5)

```
Yang, Haiwei: 345(5AM2-3-3)
Yang, Yang:
              72(4PM1-1-2),
                                  257(5AM1-3-1),
        273(5AM1-3-5)
Yano, Yuta: 611(6AM2-2-1)
Yashima, Hiroyuki: 796(6PM2-4-2), 800(6PM2-4-3)
Yasuno, Takashi:
                 29(4AM1-2-3),
                                   33(4AM1-2-4),
        37(4AM1-3-1),
                                   41(4AM1-3-2),
        84(4PM1-1-5),
                                  695(6PM1-2-3),
        760(6PM2-2-3), 764(6PM2-2-4)
Yokoyama, Yuta: 365(5AM2-4-4)
Yoshida, Daiki: 373(5PM1-1-1), 377(5PM1-1-2)
Yoshida, Kazuki: 699(6PM1-2-4)
Yoshida, Manabu: 559(6AM1-3-3)
Yoshimura, Hiroki: 361(5AM2-4-3)
Yoshinaga, Tetsuya: 485(5PM2-3-1), 489(5PM2-3-2)
Yoshizawa, Shingo: 174(4PM2-2-5)
Yotsuji, Kazuki: 1(4AM1-1-1)
Yotsuyanagi, Hiroyuki:
                                  233(5AM1-1-5),
       445(5PM2-1-1), 449(5PM2-1-2)
Yukinari, Tetsuya: 80(4PM1-1-4), 405(5PM1-2-5)
Yunokuchi, Kazutomo: 25(4AM1-2-2)
```

Ζ

Zenbutsu, Satoki: 702(6PM1-3-1) Zhai, Shaozhuo: 261(5AM1-3-2) Zhang, Cheng: 655(6AM2-4-3) Zhang, Jiaqi: 202(4PM2-4-2), 535(6AM1-2-2) Zhang, Xuetao: 345(5AM2-3-3)

b

binti Ramlan, Nurul Amirah: 515(6AM1-1-1)