



KAIT International Symposium 2018

**“Science, Technology, and Education
to Sustain a Safe and Secure Society,”**

**Kanagawa Institute of Technology
September 4, 5 /2018**

KAIT International Symposium 2018

Kanagawa Institute of Technology

1030 Shimoogino, Atsugi-shi, Kanagawa 243-0292, Japan

[Reception] K1 Building 1F near the south entrance

[Cloak] K1 Building 3F room 305

[Computer and Coffee Room] K1 Building 3F room 303

[Lunch] K1 Building 12F

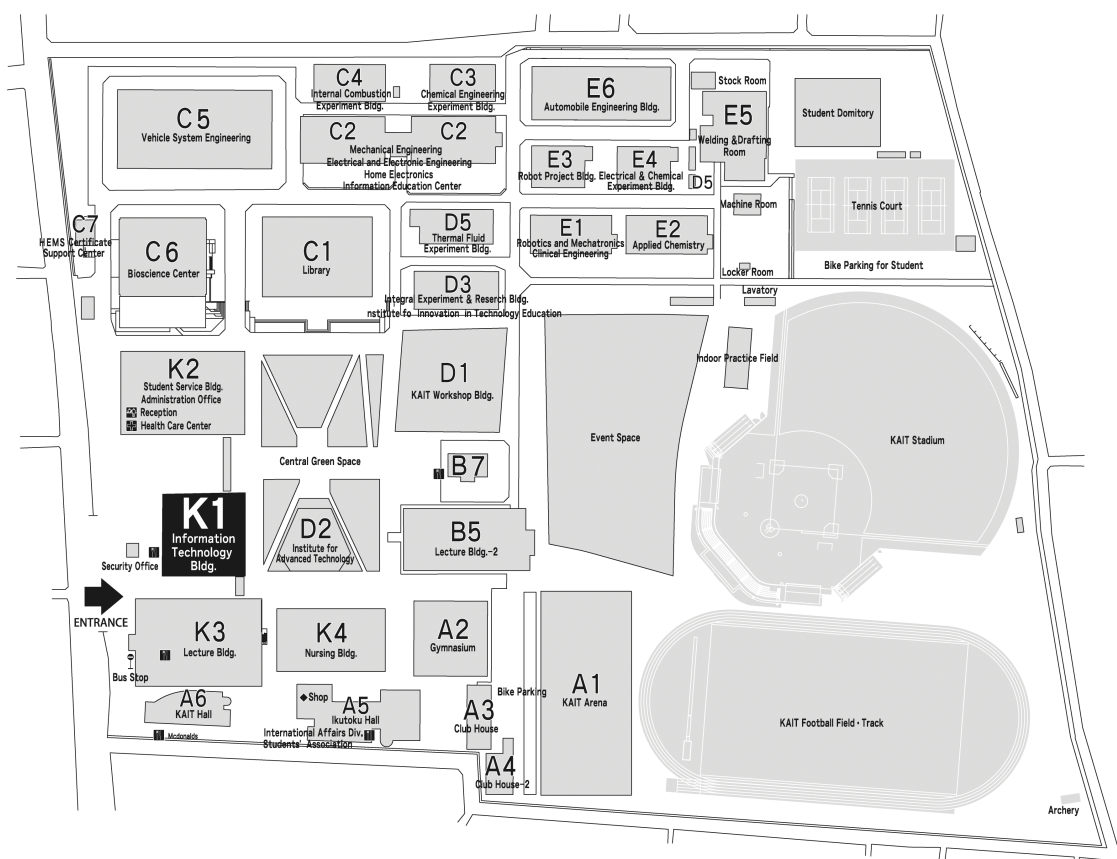
[Welcome Party] Rembrandt Hotel Atsugi

Day 1: September 4th, 2018

Sessions	Location	Time
Opening Ceremony	K1 Building 12F Media Hall	9 :30- 9 :50
Human Media	K1 Building 12F Media Hall	10:00-12:00
AI (Artificial Intelligence)	K1 Building 12F Media Hall	13:00-15:00
Environment and Next Generation Energy	K1 Building 2F room 201	13:00-15:00
Environmental Analysis and Engineering	K1 Building 2F room 201	15:30-17:00
Health and Life Science	K1 Building 2F room 202	10:00-12:00
Health and Life Science 2	K1 Building 2F room 202	15:30-17:00

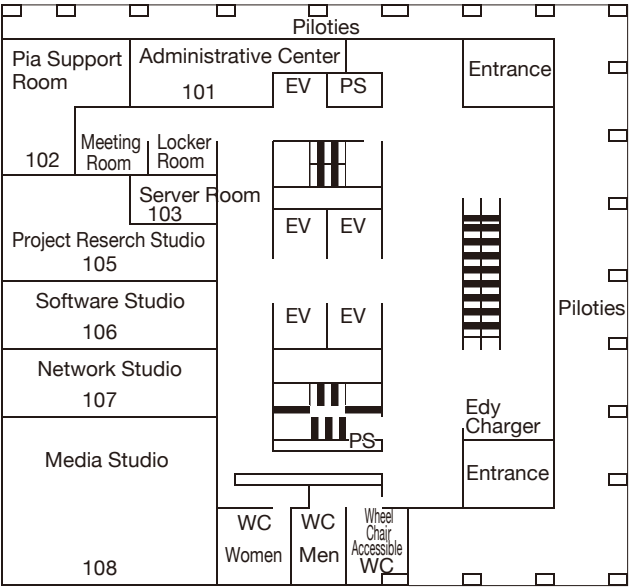
Day 2: September 5th, 2018

Sessions	Location	Time
Engineering and Education	K1 Building 2F room 201	9 :30-10:50
Introduction of Engineer Educational System for Individual University	K1 Building 2F room 201	11:00-12:00
Poster Presentations for Students	K1 Building 2F lobby	13:15-14:45
Closing	K1 Building 2F room 201	15:00-

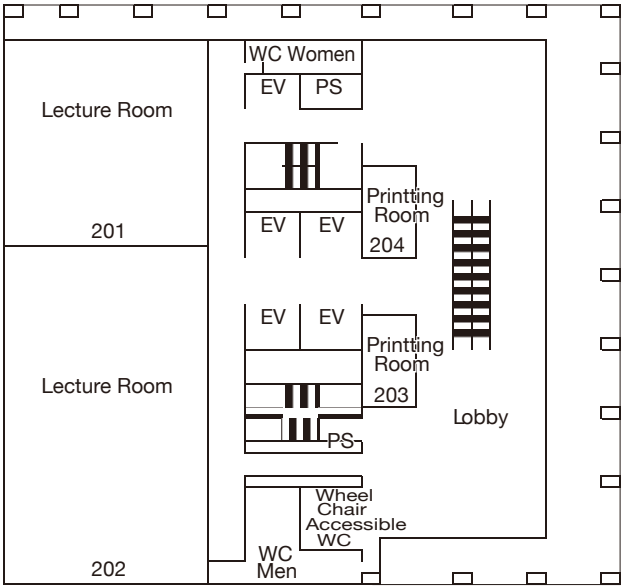


K1 Building for Faculty of Information Technology

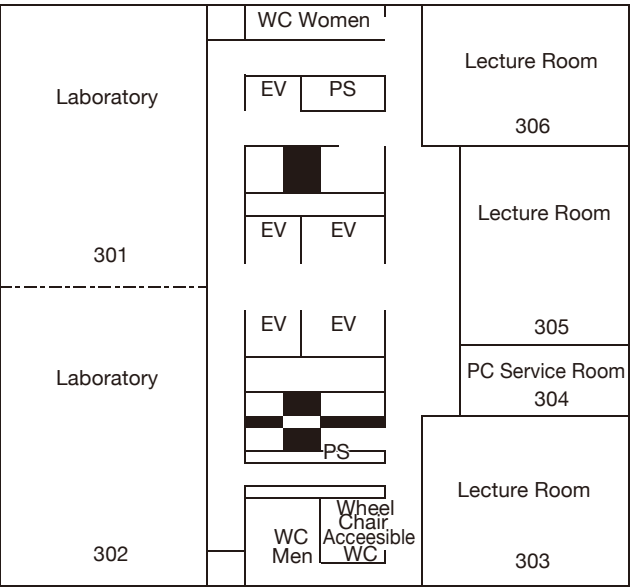
1F



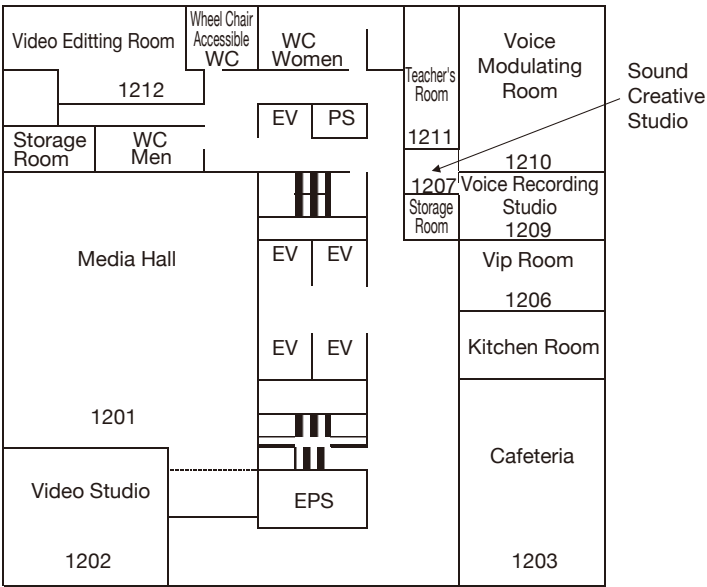
2F



3F



12F



DAY 1. September 4 (Tuesday)

9:30 ~ 9:50	Opening Remarks At K1 12F Kazumi Komiya			
	Session: Information @ K1-12F		Session: Health and Life Science @ K1-202	
	Human Media		Health and Life Science	
	Organizer	Yuichi Bannai	Organizer	Emiko Shibayama
	Presentation title	Presentator	Presentation title	Presentator
10:00	Image Segmentation And Representation Techniques For Monitoring Size Uniformity Of Chicken Carcasses In Poultry Processing	Chawan Koopipat	Family Tasks Analysis On Caring Of The Older People With Hypertension	Dewi Utari
10:30	Consideration Of Preference For Printed Food Images By Digital Imaging Solution	Aran Hansuebsai	Training Course For Standardization Of The Staff In The Neurosurgical Emergency	Mayumi Hashimoto
			Issues For The Development Of Quantitative Measurements In Family Research	Tamaki Hamazono
11:00	What Is Vection?	Takeharu Seno	Self Reflection And Stress Management As Intervention On Reducing Burden Of Stroke Caregiver In Self Help Group	Ratna Lestari
11:30	Towards More User-friendly Systems	Akihiro Miyata	Status Of Anxiety And Depression Among Chronic Disease Patients In Japan	Sachiko Tamura
			A Primary Health Care System In Bunaken Island, Indonesia	Emiko Shibayama
12:00 ~ 12:50	Lunch At K1 12F			
	Session: Information @ K1-12F		Session: Environment and Energy @K1-201	
	Artificial Intelligence (AI)		Environment and Next Generation Energy	
	Organizer	Kosuke Takano	Organizer	Keishin Koh
	Presentation title	Presentator	Presentation title	Presentator
13:00	Application Of Unsupervised Learning With Automatic Clustering For Spatial Analysis And Risk-Mapping Of Earthquake Data Distribution In Indonesia	Ali Ridho Barakba	Operational Strategy For The Combined Solar And Ground Source Heat Pump Systems(SGSHPS) With Phase Change Heat Storage	Weibo Yang
13:30	A SPA-based AI System For Natural And Social Environment-Analysis And Visualization With “Multi-Dimensional	Yasushi Kiyoki	A Study Of The Electrical Characteristics Using By-pass Diodes Of New Structure For Photovoltaic	Tsugutomo Kudou
14:00	Realizing Artificial Intelligence Concepts	Kin Fun Li	Contactless Power Transfer For Dc Micro Grids And Electric Bikes	Wei Jiang
14:30	Interactive Transcription Support System For Japanese Historical Books With A Self-Proliferating Character Image Database	Chulapong Panickriangkrai	Research And Development Of High Solar Reflective Pigments	Pattana Rakkwamsuk
15:00 - 15:30	Coffee Break At K1 #303			

	Session: Environment and Energy @K1-201		Session: Health and Life Science @ K1-202	
	Environmental Analysis and Engineering		Health and Life Science	
	Organizer	Takeji Takamura	Organizer	Emiko Shibayama
	Presentation title	Presentator	Presentation title	Presentator
15:30	Occurrence Of Endocrine Disrupting Activities And Pharmaceuticals In Treated Effluents From Taiwanese Wastewater Treatment Plants	Pei-Hsin Chou	Nursing Student Perception On Family Health Assessment	Suwarno
16:00	Updating Genotoxicity Evaluation Methods	Tomonari Matsuda	Communication Support System For Deafblind Persons	Yasuhiro Matsuda
16:30		Benno Rahardyan	Factors Influencing Older People Participation In Community Healthcare Program (Posyandu) At Yogyakarta	Anastasia Suci Sukmawati
	Welcome Party At Rembrandt Hotel Atsugi			

DAY 2. September 5 (Wednesday)

	Session: Environment and Education @ K1-201	
	Engineering and Education	
	Organaizer Yuichi Bannai/Takeji Takamura	
	Presentation title	Presentator
9:30	Next-generation Engineering Education In Disruptive Era	Suda Kiatkamjornwong
10:00	Engineering Design Education In Laboratory Class	Yasuro Ikuma
10:20	Internationalization Modeling To Improve Higher Education Institution's Competitiveness	Agustina Fitrianingrum
	Introduction of Engineer Educational System for Individual University	
	Organaizer Yo Fujimura	
11:00	Electronics Engineering Polytechnic Institute of Surabaya	
11:10	King Mongkut's University of Technology Thonburi	
11:20	University of Victoria	
11:30	Yangzhou University	
11:40	National Cheng Kung University	
11:50	Institut Teknologi Bandung	
12:00	Jenderal Achmad Yani University of Yogyakarta	
12:15	Lunch At K1 12F	
	Poster Presentation for Students	
13:15	One min flash talk presentation / Organizer Yasuhiro Iida, Hidenobu Shimizu	
13:45 ~ 14:45	Presentation in front of poster	
15:00	Ending Remarks	

Program

DAY1 **Human Media**

10:00 - 10:30 Image Segmentation And Representation Techniques For Monitoring Size Uniformity Of Chicken Carcasses In Poultry Processing

Chawan Koopipat
Chulalongkorn University

10:30 - 11:00 Consideration Of Preference For Printed Food Images By Digital Imaging Solution

Aran Hansuebsai
Chulalongkorn University

11:00 - 11:30 What Is Vection?

Takeharu Seno
Kyushu University

11:30 - 12:00 Towards More User-friendly Systems

Akihiro Miyata
Nihon University

DAY1 **Artificial Intelligence (AI)**

13:00-13:30 Application Of Unsupervised Learning With Automatic Clustering For Spatial Analysis And Risk-Mapping Of Earthquake Data Distribution In Indonesia

Ali Ridho Barakba
Electronics Engineering Polytechnic
Institute Of Surabaya

Tri Harsono
Electronics Engineering Polytechnic
Institute Of Surabaya

Amang Sudarsono
Politeknik Elektronika Negeri Surabaya

13:30 -14:00 A SPA-based AI System For Natural And Social Environment-Analysis And Visualization With “Multi-Dimensional World-Map”

Yasushi Kiyoki
Keio University

14:00 -14:30 Realizing Artificial Intelligence Concepts

Kin Fun Li
University of Victoria

14:30 - 15:00 Interactive Transcription Support System For Japanese Historical Books With A Self-Proliferating Character Image Database

Chulapong Panickriangkrai
Chulalongkorn University

Liang Li
Ritsumeikan University

DAY1 Environment and Next Generation Energy

13:00-13:30 Operational Strategy For The Combined Solar And Ground Source Heat Pump Systems(SGSHPS) With Phase Change Heat Storage

Weibo Yang
Yangzhou University

R. Xu
Yangzhou University

B. B. Yang
Yangzhou University

13:30 -14:00 A Study Of The Electrical Characteristics Using By-pass Diodes Of New Structure For Photovoltaic Applications

Tsugutomo Kudou
Kanagawa Institute of Technology

Hiroataka Tsushima
Tohoku-gakuin University

Fuhimiko Sugawara
Tohoku-gakuin University

14:00 -14:30 Contactless Power Transfer For Dc Micro Grids And Electric Bikes

Wei Jiang
Yangzhou University

Song Xu
Yangzhou University

Seiji Hashimoto
Gunma University

14:30 - 15:00 Research And Development Of High Solar Reflective Pigments

Tangon, C.
King Mongkut's University Of
Technology Thonburi

Tangkittimasak, T.,
King Mongkut's University Of
Technology Thonburi

Supothina , S,
National Metal And Materials
Technology Center, National Science
And Technology
Development Agency (NSTDA),

Pattana Rakkwamsuk
King Mongkut's University Of
Technology Thonburi

DAY1 Environmental Analysis and Engineering

15:30 - 16:00 Occurrence Of Endocrine Disrupting Activities And Pharmaceuticals In Treated Effluents From Taiwanese Wastewater Treatment Plants

Pei-Hsin Chou
National Cheng Kung University
Bou-Jyun Chen
National Cheng Kung University

16:00 - 16:30 Updating Genotoxicity Evaluation Methods

Tomonari Matsuda
Kyoto University

16:30 - 17:00

Benno Rahardyan
Institut Teknologi Bandung

DAY1 Health and Life Science

10:00 - 10:30 Family Tasks Analysis On Caring Of The Older People With Hypertension

Dewi Utari
Jenderal Achmad Yani University Of
Yogyakarta

10:30 - 10:45 Training Course For Standardization Of The Staff In The Neurosurgical
Emergency

Mayumi Hashimoto
Kanagawa Institute of Technology

10:45 - 11:00 Issues For The Development Of Quantitative Measurements In Family
Research

Tamaki Hamazono
Kanagawa Institute of Technology

11:00 - 11:30 Self Reflection And Stress Management As Intervention On Reducing
Burden Of Stroke Caregiver In Self Help Group

Ratna Lestari
Jenderal Achmad Yani University of
Yogyakarta

11:30 - 11:45 Status Of Anxiety And Depression Among Chronic Disease Patients In
Japan

Sachiko Tamura
Kanagawa Institute of Technology

11:45 - 12:00 A Primary Health Care System In Bunaken Island, Indonesia

Emiko Shibayama
Kanagawa Institute of Technology

15:30 - 16:00 Nursing Student Perception On Family Health Assessment

Suwarno
Jenderal Achmad Yani University of
Yogyakarta

16:00 - 16:30 Communication Support System For Deafblind Persons

Yasuhiro Matsuda
Kanagawa Institute of Technology

16:30 - 17:00 Factors Influencing Older People Participation In Community Healthcare Program (Posyandu) At Yogyakarta

Anastasia Suci Sukmawati Jenderal
Achmad Yani University of Yogyakarta

DAY2 Engineering and Education

9:30 - 10:00 Next-generation Engineering Education In Disruptive Era

Thanaruk Theeramunkong
Thammasat University
The Artificial Intelligence Association of Thailand
AFRS (T), Academy of Science, Royal Institute of Thailand

Parames Chutima
AFRS (T), Academy of Science, Royal Institute of Thailand
Chulalongkorn University

Worsak Kanok-Nukulchai
The Asian Institute of Technology
FRS (T), Academy of Sciences, Royal Society of Thailand

Suda Kiatkamjornwong
FRS (T), Academy of Sciences, Royal Society of Thailand
Chulalongkorn University

10:00 - 10:20 Engineering Design Education In Laboratory Class

Yasuro Ikuma
Kanagawa Institute of Technology

10:20 - 10:50 Internationalization Modeling To Improve Higher Education Institution's Competitiveness

Agustina Fitrianingrum
Universitas Jenderal Achmad Yani
Yogyakarta

Poster Session Program

Information

- 1 Interactive Integral Photography Holographic Pyramid Using a Game Engine
Shohei Anraku, Toshiaki Yamanouchi, Kazuhisa Yanaka
Kanagawa Institute of Technology
- 2 Image Ranking Algorithms
Marina Ibrishimova , Kin Fun Li
University of Victoria, Canada
- 3 High Accuracy Indoor Positioning Implemented Data Transmission Function Using Diffused Sound
Takeru Kadokura, Shigenori Ioroi, Hiroshi Tanaka
Kanagawa Institute of Technology
- 4 Sign Language Recognition Performance By Machine Learning Using Multiple Classifiers
Tatsunori Ozawa, Kazuki Sakamoto, Hiromitsu Nishimura, Hiroshi Tanaka.
Kanagawa Institute of Technology
- 5 A Method For Extracting User Roles Based On User's Activities On Online Technical Communication
Hayato Tsukiji Kosuke Takano
Kanagawa Institute of Technology
- 6 Cross-modal Interaction Between Vection Perception And Olfactory Stimulation
Aoi Aruga, Yuichi Bannai, Takeharu Seno
Kanagawa Institute of Technology
- 7 Emotion Extraction From User's Utterances In Microblog For Content Recommendation
Shun Fujita Kosuke Takano
Kanagawa Institute of Technology
- 8 An Automatic Testing System For Server Failures Using Virtual Execution Environment
Takayuki Kasai Kosuke Takano
Kanagawa Institute of Technology
- 9 Development And Evaluation Of A Gustatory Display Using A Piezoelectric Device
Yukito Nagakusa, Yuichi Bannai.
Kanagawa Institute of Technology
- 10 Development Of An Olfactory Display Using A Piezoelectric Device
Shigeaki Nakamura, Yuichi Bannai
Kanagawa Institute of Technology
- 11 A Basic Study Of A Conversational Agent Speaking With Ambiguity
Genki Kurita, Ryota Nakahara, Daiji Nagaoka, Akihiro Miyata
Nihon University

12 A Presentation Method Of Asynchronous Viewer's Voice In A Video Viewing System

Yuya Matsunaga, Shunsuke Yanaka,
Yuichi Bannai

Kanagawa Institute of Technology

13 Study Of Utilization Of Web Scrapping And User Acceptance To Job Seeking Web Application

Tony Wibowo, Dina Setiana, Agus Zendy,
Claudya Noverly, Kelvin

Universitas Internasional Batam, Indonesia,
Okutama Japanese Language School, Japan

Environment and Engineering

14 Cytotoxicity Evaluation Of Nanodiamond Doped With Ethidium Bromide

Mizuki Mori Takeji Takamura-Enya

Kanagawa Institute of Technology

15 Detection Of Endocrine Disrupting Activities In Indoor Dust From Air Conditioner Filter Using Bioassays

Wen-Chi Yeh, Fung-Chi Ko, Pei-Hsin Chou

National Cheng Kung University
National Dong Hwa University

16 Transformation Of Kanamycin Resistance Gene Into Mesembryanthemum Crystallinum

Yuki Mochiduki, Takashi Saito

Kanagawa Institute of Technology

17 Analysis Of Endocrine Disrupting Activities In Taiwanese Southern Estuarial Sediment Using Bioassays

Chi-Wen Huang, Pei-Hsin Chou

National Cheng Kung University, Taiwan

18 Vehicle Transient Response Effects On Driving Behavior

Kazuki Sato, Takatoshi Tsukano, Masato Abe,
Makoto Yamakado, Yoshio Kano

Kanagawa Institute of Technology

19 Small Fuel Cell Vehicle For Small Electric Vehicle Competition

Yoshihiko Takahashi, Kento Ikemoto

Kanagawa Institute of Technology

20 Fault Diagnosis Of C-Si Modules In A PV String

Shuai Yang, Kazutaka Itako, Tsugutomo Kudoh,
Keishin Koh, Qiang Ge

Kanagawa Institute of Technology
Yangzhou University, P.R. China

21 Search For Extreme Environment Microorganisms Living In Deep-sea Sediments

Shiia Kiyonobu, Hasui Mizunao, Makita Hiroko,
Saito Takashi

Kanagawa Institute of Technology

22 Analysis Of PV Array With MPPT Unit

Yusuke Takeda Kazutaka Itako
Kanagawa Institute of Technology

23 Consideration Of Time-based Interlocking Control System For Motorized Blinds And Lighting

Sayo Kaneko, Yusuke Kumakura,
Kazuyuki Aihara, Takahiro Sakai,
Takayuki Mitsu, Yuki Hori, Masao Isshiki
Kanagawa Institute of Technology

24 Withdrawn

25 Synthesis Of Photoresponsive Polymer Material With Dynamic Cross Linker

Motoko Kudo, Takashi Saito
Kanagawa Institute of Technology

26 Study Of The Method For Improving Traffic Flow With Safety Driving In The Mixed Environment Of Autonomous Vehicle And Human-Operated Vehicle

Hiroto Furukawa, Ryoza Kiyohara
Kanagawa Institute of Technology

27 Elongation Of Hydantoins Bearing Glutarimide Or Succinimide

Ryuku Namiki Jun-ichi Yamaguchi
Kanagawa Institute of Technology

28 A Study On Risk Predictive Technologies Considering A Road Surface Friction M In Unsignalized Intersection

Tatsuya Shimasaki, Hideo Inoue
Kanagawa Institute of Technology

29 The Study Of Evaluation Methodology About Risk Prediction Algorithm Using Traffic Space Modeling

Haipeng Zhang, Hideo Inoue,
Kanagawa Institute of Technology

30 Converter And Communication For LVDC Microgrids

HuangMing, Wei Jiang
Yangzhou University

31 A Low Cost Hardware-in-the-loop Simulator For Power Electronic Circuits

Haining Ma, Wei Jiang
Yangzhou University

32 Evalution Of Hyaluronan Production By HAS2 Inducing Compounds From Atractylodis Lanseae And The Construction Of HAS2-GFP Fusion Vector

Tam Nguyen, Iida Yasuhiro, Yukio Nakamura
Kanagawa Institute of Technology

33 Modification Of Porous Membrane Using Phospholipid Polymer Brushes

Jiaquan Chen, S. Ichimura, K. Ishihara

Kanagawa Institute of Technology

34 Differential Substrate Specificity Of The Homologous Co-Chaperonins GroES And Gp31 In The Chaperonin-dependent Protein Folding

Minami Nomura, Ayumi Koike-Takeshita

Kanagawa Institute of Technology

Engineering and Education

35 Course Scheduling With Genetic Algorithm

Araya Chaowalit

University of Victoria, Canada

36 Development Of English Listening System For Learning Different Pronunciations In Various Countries

Kohei Kamimura, Kosuke Takano

Kanagawa Institute of Technology

Additional Poster Presentation

37 Cross-Cultural Analysis Of Food Images In Advertising Between Thailand And Japan

Tippayalak Srikaew

Chulalongkorn University