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Chairs	Xuan Ma, <i>Xi'an University of Technology, China</i> Guoan Bi, <i>Nanyang Technological University, Singapore</i>

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Chairs	Shichuan Ding, <i>Anhui University, China</i> Wei Wang, <i>Beihang University, China</i>

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Date/Time	June 20, 2019 (Thursday), 16:00 – 18:00
Venue	Lily Room 1
Chairs	Renjie He, <i>Nanyang Technological University, Singapore</i> Tiong Hoo Lim, <i>Universiti Teknologi Brunei, Brunei</i>

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Chairs	Youmin Zhang, <i>Concordia University, Canada</i> Qing Hui, <i>University of Nebraska-Lincoln, USA</i>

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Date/Time	June 20, 2019 (Thursday), 16:00 – 18:00
Venue	Lily Room 3
Chairs	Huijin Fan, <i>Huazhong University of Science and Technology, China</i> Lei Yang, <i>Xi'an University of Technology, China</i>

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Chairs	Xuemei Zheng, <i>Harbin Institute of Technology, China</i> Xiaoxuan Guo, <i>Electric Power Research Institute Guangxi Power Grid Corporation, China</i>

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Venue	Lily Room 6
Chairs	Mao Shan, <i>The University of Sydney, Australia</i> Qinyuan Ren, <i>Zhejiang University, China</i>

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Venue	Lily Room 1
Chairs	Linxian Zhi, <i>Lishui University, China</i> Haibo Bao, <i>Nanning Power Supply Bureau Guangxi Power Grid Corporation, China</i>

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Date/Time	June 21, 2019 (Friday), 08:00 – 10:00
Venue	Lily Room 2
Chairs	Guangyu Xiong, <i>Sanya University, China</i> Weihai Chen, <i>Beihang University, China</i>

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Xin Tong, Ziwei Jiang, Jinbin Li, Zhi Zhang, Pengcheng Gan and Zhewei Zhang
- FrA2.4 09:00 - 09:20 SF-007072
Modeling and Robust Adaptive Fuzzy Control for Servo Layer Control of a Motor/Gear Subsystem.....1835
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- FrA2.5 09:20 - 09:40 SF-020508
A variable Inertance and Variable Damping Vibration Control System with Electric Circuit.....1841
Donghong Ning, Zhijuan Jia, Haiping Du, Weihua Li and Nong Zhang



Session	FrA3: Power Electronics (X)
Date/Time	June 21, 2019 (Friday), 08:00 – 10:00
Venue	Lily Room 3
Chairs	Zhonggang Yin, <i>Xi'an University of Technology, China</i> Duo Zhao, <i>Southwest JiaoTong University, China</i>

- FrA3.1 08:00 - 08:20 SF-021687
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Sen Wang, Yunqing Pei and Bo Yang
- FrA3.2 08:20 - 08:40 SF-012009
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Anyuan Wang, Haitao Chen, Peng Jin, Jun Huang, Dong Feng and Minxin Zheng
- FrA3.3 08:40 - 09:00 SF-004634
Development of the Motor Test System based on LabVIEW with Ethernet Communication.....1857
Zheng Dang and Qixun Zhou
- FrA3.4 09:00 - 09:20 SF-020761
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Shucong Luo, Kexin Yang, Feng An and Wengsheng Song
- FrA3.5 09:20 - 09:40 SF-016314
Non-Grid Supply Low Voltage Power Source System Based on Impedance Bond.....1867
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- FrA3.6 09:40 - 10:00 SF-004146
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Zhonggang Yin, Wei Li, Yanqing Zhang and Ruijie Tang

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Session	FrA4: Power Electronics (XI)
Date/Time	June 21, 2019 (Friday), 08:00 – 10:00
Venue	Lily Room 4
Chairs	Miao Zhu, <i>Shanghai Jiao Tong University, China</i> Xiaoqiong He, <i>Southwest Jiaotong University, China</i>

- FrA4.1 08:00 - 08:20 SF-009016
Control Strategy for Four Phase Open Faults of Dual Three-phase PMSG.....1876
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- FrA4.2 08:20 - 08:40 SF-010618
Effects of DC Power Flow Controller On DC Power Network Loss.....1882
Shuai Wang, Miao Zhu, Xu Zhong and Xu Cai
- FrA4.3 08:40 - 09:00 SF-009148
Simulation Circuit Model and System Design for Wireless Power Transfer System with an Intermediate Coil.....1888
Zhenning Li, Xiaoqiong He, Keyu Pan and Pengcheng Han
- FrA4.4 09:00 - 09:20 SF-002437
Research on Full Bridge Converter of Magnetron Sputtering Power Supply.....1894
Xiping Huang, Guitao Chen, Shaohua Cheng and Danyang Ma
- FrA4.5 09:20 - 09:40 SF-017523
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Haitao Chen, Jun Huang, Yi Zheng, Luozeng Zhou, Xiaobin He and Wangbin Zhao
- FrA4.6 09:40 - 10:00 SF-010537
A Triple Interline DC Power Flow Controller with Dual-Freedom Control Function.....1903
Siqi Liu, Miao Zhu, Xu Zhong and Xu Cai



Session	FrA5: Renewable Generation and AC/DC Microgrid (II)
Date/Time	June 21, 2019 (Friday), 08:00 – 10:00
Venue	Lily Room 5
Chairs	Weixiang Shen, <i>Swinburne University of Technology, Australia</i> Shichuan Ding, <i>Anhui University, China</i>

- FrA5.1 08:00 - 08:20 SF-013935
Ultra-short-term Prediction of Wind Power based on EMD and DLSTM.....1909
Baobin Zhou, Bo Sun, Xiao Gong and Che Liu
- FrA5.2 08:20 - 08:40 SF-018481
Research on Neutral-Point Balance Control of Three-Level Inverter Based on Hybrid DPWM.....1914
Yongchao Sun, Chunshui Du, Qiang Liu, Bowei Zhu and Changxuan Wu
- FrA5.3 08:40 - 09:00 SF-018791
A Space Vector Pulse Width Modulation with Capacitor Voltage Balance Control for Five-level Active Neutral-Point-Clamped Inverter Based on g-h Coordinate System.....1920
Bowe Zhu, Chunshui Du, Qiang Liu, Yongchao Sun and Bingxin Jia
- FrA5.4 09:00 - 09:20 SF-020982
Battery System Selection in DC Microgrids for Residential Applications: An Australian Case Study.....1926
Udayanka G.K. Mulleriyawage, Weixiang Shen and Cungang Hu
- FrA5.5 09:20 - 09:40 SF-012963
Comprehensive Small Signal Stability Analyses for Hybrid Energy Storage System under Novel Transient Power Allocation Strategy.....1932
Pengfeng Lin, Peng Wang, Jianfang Xiao, Chi Jin, Zhijie Lian and Koh Leong Hai
- FrA5.6 09:40 - 10:00 SF-020214
A Control and Power Management Scheme for Photovoltaic/Fuel Cell/Hybrid Energy Storage DC Microgrid.....1937
Jinsong Kang, Hao Fang and Lanying Yun



Session	FrA6: System Design and Test
Date/Time	June 21, 2019 (Friday), 08:00 – 10:00
Venue	Lily Room 6
Chairs	Jin Xiao, <i>Beihang University, China</i> Zhihong Man, <i>Swinburne University of Technology, Australia</i>

- FrA6.1 08:00 - 08:20 SF-021873
Design of Data Acquisition and Processing System Based on LabVIEW for a Mie lidar.....1942
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- FrA6.2 08:20 - 08:40 SF-019526
Method for Improving Workpiece Rigidity by Machining Ultra-thin Wall Parts.....N/A
Ma Pengju, Liao Zhibing, Guo Haoyu, Guo Kun, Ning Shunti and Li Wen
- FrA6.3 08:40 - 09:00 SF-020613
Impact Dynamic Modeling of Space Flexible Manipulators Based on Continuous Approach.....1953
Gang Chen, Dan Liu and Long Zhang
- FrA6.4 09:00 - 09:20 SF-019666
Design of a Data System for the Avionics System based on the Open System Architecture.....1958
Jin Xiao, Xiangjun Liu, Xiaoguang Hu, Guofeng Zhang and Jieshi Shen
- FrA6.5 09:20 - 09:40 SF-020516
Obstacle Avoidance Path Planning for Space Manipulator Based on Improved Probability Roadmap Method.....1963
Junting Fei, Gang Chen, Qingxuan Jia and Dan Liu
- FrA6.6 09:40 - 10:00 SF-022101
Virtual Reality Training System for Upper Limb Rehabilitation.....1969
Xingming Wu, Haipeng Liu, Jianbin Zhang and Weihai Chen

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Session	FrB1: Signal and Information Processing (IV)
Date/Time	June 21, 2019 (Friday), 10:30 – 12:30
Venue	Lily Room 1
Chair	Shiqian Wu, <i>Wuhan University of Science and Technology, China</i>

- FrB1.1 10:30 - 10:50 SF-005835
Crime Scene Investigation Image Retrieval using a Hierarchical Approach and Rank Fusion.....1974
Wei Liu and Chen Yang Wu
- FrB1.2 10:50 - 11:10 SF-018198
Multi-illuminant Estimation Based on Spatial Fuzzy C-means Clustering with Application to
Image White Balance.....1979
Meng-Wei Lin, Ting-Chen Wu and Cheng-Lun Chen
- FrB1.3 11:10 - 11:30 SF-017531
New Band-pass and Band-stop Filters with three Memory Devices.....1985
Mingxiao Wang, Yongbin Yu, Nijing Yang, Chenyu Yang and Huihui Ma
- FrB1.4 11:30 - 11:50 SF-007587
A Cascaded IIR Filter with Optimized Group Delay.....1990
Xingyuan Tong, Lulu He, Huimin Du and Siwan Dong
- FrB1.5 11:50 - 12:10 SF-006777
Global Voice Chat over Short Message Service of Beidou Navigation System.....1994
Yijing Wei, Huiru Liu, Junkai Ma, Yuting Zhao, Hu Lu and Guiqing He
- FrB1.6 12:10 - 12:30 SF-016918
Research on Veneer Correction System based on Machine Vision.....1998
Jianbo Sun, Nainjian Chen, Xiangdon Han, Xu Wang, Yulin Huang and Yingjun Li

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Session	FrB2: Control and Systems (VI)
Date/Time	June 21, 2019 (Friday), 10:30 – 12:30
Venue	Lily Room 2
Chairs	Dong Wang, <i>Dalian University of Technology, China</i> Bai Zhang, <i>North Minzu University, China</i>

- FrB2.1 10:30 - 10:50 SF-006564
Control of a Linear Reciprocating Switched Reluctance Motor for Compressors.....2003
Liangyuan Chen, Dajian Li and Jian Zhao
- FrB2.2 10:50 - 11:10 SF-003581
Research on Control Strategy of Interleaved BUCK Circuit Based on BP Neural Network Model.....2009
Cailin Wang and Hao Tian
- FrB2.3 11:10 - 11:30 SF-004189
A Dual-motor Electric Power Steering System for Commercial Vehicle.....2014
Yaohua Li, Jie He, Youfei Nan, Qianlong Feng, Yangsen Zhang and Jikang Fan
- FrB2.4 11:30 - 11:50 SF-011975
Track Trajectory Generation Method Using GNSSbased Simulation Platform for Maglev Trains.....2020
Kai Gao, Debiao Lu, Baigen Cai and Jiang Liu
- FrB2.5 11:50 - 12:10 SF-011819
GNSS Data Driven Clustering Method for Railway Environment Scenarios Classification.....2026
Jun Tan, Jian Wang and Debiao Lu
- FrB2.6 12:10 - 12:30 SF-005517
Tube-based Robust Current Control of Induction Motors.....2032
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Session	FrB3: Power Electronics (XII)
Date/Time	June 21, 2019 (Friday), 10:30 – 12:30
Venue	Lily Room 3
Chairs	Zhonggang Yin, <i>Xi'an University of Technology, China</i> Qi Zhang, <i>Xi'an University of Technology, China</i>

- FrB3.1 10:30 - 10:50 SF-004707
An ESO-Based Repetitive Controller Design for PMLSM.....2037
Zhonggang Yin, Yongkang Wang, Jing Liu, Ruifeng Zhang and Baoning Wang
- FrB3.2 10:50 - 11:10 SF-018295
Design and Study of Data and Power Wireless Transfer System for UAV.....2043
Xiaokun Li, Junwei Lu and Wayne Water
- FrB3.3 11:10 - 11:30 SF-015423
DCM Low Frequency Oscillation in valley V^2 Controlled Boost Converter.....2049
Shengzhong He, Haoyang Gan, Xiaoqiong He, Yinglei Xu, Ping Yang, Jiancheng Zhou, Songrong Wu and Jikun Li
- FrB3.4 11:30 - 11:50 SF-002194
Design and Optimization of Permanent Magnet Synchronous Motor Based on Finite Element analysis.....2055
Jifang Liu and Qixun Zhou
- FrB3.5 11:50 - 12:10 SF-021415
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Hongyu Zhu, Yi Zhang and Donglai Zhang
- FrB3.6 12:10 - 12:30 SF-002836
Robust Predictive Current Control for Photovoltaic Energy Storage System Based on Second-order Tracking Differentiator.....2065
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Session	FrB4: Power Electronics (XIII)
Date/Time	June 21, 2019 (Friday), 10:30 – 12:30
Venue	Lily Room 4
Chairs	Shaoru Zhang, <i>Hebei Normal University, China</i> Tianfu Sun, <i>Chinese Academy of Sciences, China</i>

- FrB4.1 10:30 - 10:50 SF-017396
An Improved Detection Algorithm in Traction Power Supply System.....2071
Xiaoqiong He, Wenjie Pan, Jun Peng, Pengcheng Han and Zeliang Shu
- FrB4.2 10:50 - 11:10 SF-000833
Influence of Voltage Waveform on DC Aging characteristics of ZnO Varistor in Ultra-high Voltage Power Transmission.....2077
Rong Shi, Chenjie Ji and Shinan Wang
- FrB4.3 11:10 - 11:30 SF-020745
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- FrB4.4 11:30 - 11:50 SF-003573
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- FrB4.5 11:50 - 12:10 SF-008044
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Session	FrB5: Sensing, Diagnostics, Prognostics and Control Based on Big Data
Date/Time	June 21, 2019 (Friday), 10:30 – 12:30
Venue	Lily Room 5
Chairs	Youmin Zhang, <i>Concordia University, Canada</i> Linxian Zhi, <i>Lishui University, China</i>

- FrB5.1 10:30 - 10:50 SF-007269
 Preliminary Study on Fault Diagnosis and Intelligent Learning of Fused Deposition Modeling (FDM) 3D Printer.....2098
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- FrB5.2 10:50 - 11:10 SF-019143
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- FrB5.3 11:10 - 11:30 SF-007552
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- FrB5.4 11:30 - 11:50 SF-013617
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- FrB5.5 11:50 - 12:10 SF-021334
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Session	FrB6: System Test and Analysis
Date/Time	June 21, 2019 (Friday), 10:30 – 12:30
Venue	Lily Room 6
Chairs	Xiaoxuan Guo, <i>Electric Power Research Institute Guangxi Power Grid Corporation, China</i> Jin Xiao, <i>Beihang University, China</i>

- FrB6.1 10:30 - 10:50 SF-021466
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Jianhua Wang, Wang Li, Weihai Chen and Jianbin Zhang
- FrB6.2 10:50 - 11:10 SF-022071
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- FrB6.3 11:10 - 11:30 SF-017027
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- FrB6.4 11:30 - 11:50 SF-016993
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- FrB6.5 11:50 - 12:10 SF-017868
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- FrB6.6 12:10 - 12:30 SF-021989
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Session	FrC1: Signal and Information Processing (V)
Date/Time	June 21, 2019 (Friday), 13:30 – 15:30
Venue	Lily Room 1
Chairs	Jiandong Mao, <i>North Minzu University, China</i> Tiong Hoo Lim, <i>Universiti Teknologi Brunei, Brunei</i>

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- FrC1.3 14:10 - 14:30 SF-021369
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- FrC1.4 14:30 - 14:50 SF-016756
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- FrC1.5 14:50 - 15:10 SF-016829
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Session	FrC2: Control and Systems (VII)
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Venue	Lily Room 2
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- FrC2.3 14:10 - 14:30 SF-011991
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- FrC2.6 15:10 - 15:30 SF-017418
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Session	FrC3: Power Electronics (XIV)
Date/Time	June 21, 2019 (Friday), 13:30 – 15:30
Venue	Lily Room 3
Chairs	Kai Jing, <i>Xi'an University of Technology, China</i> Jingjing Huang, <i>Xi'an University of Technology, China</i>

- FrC3.1 13:30 - 13:50 SF-000779
A 168 dB High Gain Folded Cascode Operational Amplifier for Delta-Sigma ADC.....2228
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- FrC3.2 13:50 - 14:10 SF-001511
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- FrC3.3 14:10 - 14:30 SF-009083
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- FrC3.4 14:30 - 14:50 SF-001732
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- FrC3.5 14:50 - 15:10 SF-006432
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- FrC3.6 15:10 - 15:30 SF-000876
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Session	FrC4: Power Electronics (XV)
Date/Time	June 21, 2019 (Friday), 13:30 – 15:30
Venue	Lily Room 4
Chairs	Qi Zhang, <i>Xi'an University of Technology, China</i> Miao Zhu, <i>Shanghai Jiao Tong University, China</i>

- FrC4.1 13:30 - 13:50 SF-000671
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- FrC4.3 14:10 - 14:30 SF-000906
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- FrC4.4 14:30 - 14:50 SF-002445
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- FrC4.5 14:50 - 15:10 SF-001791
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- FrC4.6 15:10 - 15:30 SF-001252
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Session	FrC5: System Control and Simulation (I)
Date/Time	June 21, 2019 (Friday), 13:30 – 15:30
Venue	Lily Room 5
Chairs	Hongwei Zhang, <i>Southwest Jiaotong University, China</i> Jing Zhou, <i>University of Agder, Norway</i>

- FrC5.1 13:30 - 13:50 SF-020141
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- FrC5.2 13:50 - 14:10 SF-020583
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- FrC5.3 14:10 - 14:30 SF-020036
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- FrC5.6 15:10 - 15:30 SF-022918
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Session	FrC6: Transformerless Inverter Systems: Topologies, Modulations, Control Strategies, and their Applications
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Venue	Lily Room 6
Chair	Wu Chen, <i>Southeast University, China</i>

- FrC6.1 13:30 - 13:50 SF-018597
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- FrC6.2 13:50 - 14:10 SF-011118
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- FrC6.3 14:10 - 14:30 SF-013242
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- FrC6.4 14:30 - 14:50 SF-017299
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- FrC6.5 14:50 - 15:10 SF-011088
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Session	FrD1: Signal and Information Processing (VI)
Date/Time	June 21, 2019 (Friday), 16:00 – 18:00
Venue	Lily Room 1
Chair	Shiqian Wu, <i>Wuhan University of Science and Technology, China</i>

- FrD1.1 16:00 - 16:20 SF-010448
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- FrD1.3 16:40 - 17:00 SF-004405
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- FrD1.4 17:00 - 17:20 SF-022241
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- FrD1.5 17:20 - 17:40 SF-008346
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Chairs	Dong Wang, <i>Dalian University of Technology, China</i> Wu Chen, <i>Southeast University, China</i>

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Chairs	Mingyao Ma, <i>Hefei University of Technology, China</i> Juan Shi, <i>Victoria University, Australia</i>

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Chairs	Jingjing Huang, <i>Xi'an University of Technology, China</i> Xuemei Zheng, <i>Harbin Institute of Technology, China</i>

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Chairs	Hongwei Zhang, <i>Southwest Jiaotong University, China</i> Fanglin Luo, <i>Anhui University, China</i>

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Date/Time	June 21, 2019 (Friday), 16:00 – 18:00
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Chairs	Cungang Hu, <i>Anhui University, China</i> Huafeng Xiao, <i>Southeast University, China</i>

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