

Conference Schedule

Conference On-Site Registration

June 19, 14:00 – 18:00

Location: Shanghai Marriott Hotel Riverside, 99 Jiangbin Road, Shanghai, China

Session A1

Topic: Terahertz Technology

Chair: Toshiaki Hattori

A01

8:00 - 8:25 AM Room A June 20

Active imaging with incoherent sub-terahertz radiation in smoky environments

Naofumi shimizu, Ken Matsuyama

A02

8:25 - 8:50 AM Room A June 20

Tune the polarization of terahertz waves via subwavelength metallic gratings

Ren-Hao Fan, Ru-Wen Peng, and Mu Wang

A03

8:50 - 9:10 AM Room A June 20

Modeling and Analysis of Bow-Tie Antenna Integrated Resonant-Tunneling-Diode Relaxation Oscillators for Wireless Radio Applications

Hirokazu Yamakura, Michihiko Suhara

A04

9:10 - 9:35 AM Room A June 20

Coherent and Continuous Terahertz Emitters from High- T_c Superconductor Mesa structures

Kazuo Kadowaki

A05

9:35 - 10:00 AM Room A June 20

Transient Device Simulation Using Deterministic Boltzmann Equation Solvers

Sung-Min Hong

Session A2

Topic: Terahertz Technology

Chair: Kazuo Kadowaki

A06

10:20 - 10:45 AM Room A June 20

Terahertz semiconductor devices for photonic applications

Hua Li, Jun-Cheng Cao

A07

10:45 - 11:10 AM Room A June 20

Conference Schedule

<i>Making structured metals transparent for broadband electromagnetic waves</i>
Ru-Wen Peng , Ren-Hao Fan, and Mu Wang
A08
11:10 - 11:35 AM Room A June 20
<i>Terahertz-wave parametric wavelength conversion at room temperature</i>
Shin'ichiro Hayashi , Kouji Nawata, Kodo Kawase, Hiroaki Minamide
A09
11:35 - 12:00 PM Room A June 20
<i>Development of Small Size Terahertz Vacuum Sources in IECAS</i>
Wenxin Liu , Chao Zhao, Xin Guo
A10
12:00 - 12:25 PM Room A June 20
<i>Recent Progress of Terahertz Detection Based on Two-dimensional Materials</i>
Changlong Liu, Weiwei Tang, Lin Wang

Session A3
Topic: Terahertz Technology
Chair: Atsushi Kanno
A11
14:00 - 14:25 PM Room A June 20
<i>300GHz wireless link with a CMOS transceiver</i>
Minoru Fujishima
A12
14:25 - 14:50 PM Room A June 20
<i>Surface plasmon enhanced sub-Thz CMOS detectors</i>
Xiaoli Ji , C. Zhang, J. Peng, Q.Lou, R.Wu, and F.Yan
A13
14:50 - 15:15 PM Room A June 20
<i>Photonic crystal cavity optomechanics for the applications of low phase noise frequency source and high-performance sensing</i>
Yongjun Huang , Guangjun Wen
A14
15:15 - 15:40 PM Room A June 20
<i>Fast THz Modulator based on the stagger-netlike GaN HEMT active metamaterial</i>
Yaxin Zhang

Conference Schedule

Session A4	
Topic: Terahertz Technology	
Chair: Minoru Fujishima	
A15	
16:00 - 16:25 PM Room A June 20	
<i>Hydration of various solutions observed by terahertz spectroscopy</i>	
Toshiaki Hattori	
A16	
16:25 - 16:50 PM Room A June 20	
<i>Ultra-broadband Wireless Communications in the 0.1-10 Terahertz Band</i>	
Chong Han	
A17	
16:50 - 17:15 PM Room A June 20	
<i>Millimeter- and terahertz-wave technology for communication and radar/imaging applications by photonics technology</i>	
Atsushi Kanno	
A18	
17:15 - 17:40 PM Room A June 20	
<i>Fundamentals of Terahertz Communication in Nanonetworks</i>	
Xin-Wei Yao	
A19	
17:40 - 18:05 PM Room A June 20	
<i>THz waveguide filters based on the periodic structures</i>	
Ya-Xian Fan, Lu Zhang, Zhi-Nan Jiang, Zhi-Yong Tao	

Session B1	
Topic: Synthesis and Application of Transition-metal dichalcogenides	
Chair: Yanfeng Zhang	
B01	
8:00 - 8:25 AM Room B June 20	
<i>Epitaxial Growth of Two-Dimensional Layered Transition-Metal Dichalcogenides and Heterostructures for 2D-Electronics</i>	
Yumeng Shi	
B02	

Conference Schedule

8:25 - 8:50 AM Room B June 20
<i>Hysteresis of Transfer Characteristics in Field-Effect Transistors with a Molybdenum Disulfide Channel</i>
Yoshihiro Shimazu
B03
8:50 - 9:15 AM Room B June 20
<i>Valley Edelstein Effect in Monolayer Transition Metal Dichalcogenides</i>
Katsuhisa Taguchi, Yuki Kawaguchi, Yukio Tanaka, Kam Tuen Law
B04
9:15 - 9:40 AM Room B June 20
<i>Growth of TMDC Nanostructures by Chemical Vapor Deposition</i>
Toshihiro Shimada, Mengting Weng, Takashi Yanase, Sho Watanabe, Fumiya Uehara, Taro Nagahama
B05
9:40 - 10:05 AM Room B June 20
<i>Electrocatalytic hydrogen evolution reaction of MX_2 and MX_2 heterostructures</i>
Yanfeng Zhang

Session B2
Topic: Silicon for Energy Storage
Chair: Ho Seok Park
B06
10:20 - 10:45 AM Room B June 20
<i>Prelithiated Si nanoparticles-carbon nanotubes composite anodes for Li-ion batteries</i>
Jim P. Zheng, Kang Yao, Richard Liang
B07
10:45 - 11:10 AM Room B June 20
<i>Investigating structure and stress evolution in Si anode using in situ high pressure technique and Raman microscopy</i>
Zhidan Zeng
B08
11:10 - 11:35 AM Room B June 20
<i>Silicon-based anode materials for high capacity lithium ion batteries</i>
Chuanbo Li, Junying Zhang
B09

Conference Schedule

11:35 - 12:00 PM Room B June 20
<i>Efficient Solar-Rechargeable Lithium Ion Battery Energy Storage</i>
Qiquan Qiao

Session B3

Topic: Nanotechnology for Solar Energy Collection and Conversion

Chair: Jyh-Chiang Jiang

B10

14:00 - 14:25 PM Room B June 20

High performances flexible energy storage devices

Bin Wang

B11

14:25 - 14:50 PM Room B June 20

Porous carbon fibers for electromegnetic wave absorption

Guang Li

B12

14:50 - 15:15 PM Room B June 20

High Temperature Flexible Supercapacitors Using Graphene Electrodes

Ho Seok Park

B13

15:15 - 15:40 PM Room B June 20

Rational design of Novel Carbon Catalysts for Clean Energy Conversion and Storage

Zhenhai Xia

Session B4

Topic: Graphene for Energy Storage

Chair: Zhenhai Xia

B14

16:00 - 16:25 PM Room B June 20

Kilohertz supercapacitors based on graphene and carbon fiber for AC filtering and energy harvesting

Zhaoyang Fan

B15

16:25 - 16:50 PM Room B June 20

Composite AgBr colloidal spheres/g-C₃N₄ nanosheets: An effective LED-irradiation photocatalyst

Guochang Chen, Cun-Yue Guo, Mingfu Ye, Hongbin Qiao, Lixin Xu, Xianwen Wei

Conference Schedule

B16
16:50 - 17:15 PM Room B June 20
<i>Laser direct writing of high-performance micro-supercapacitors on graphene oxide and polymer films</i>
Jinguang Cai, Akira Watanabe
B17
17:15 - 17:40 PM Room B June 20
<i>How to improve the hydrogen storage of graphene based systems?</i>
Jyh-Chiang Jiang, Santhanamoorthi Nachimuthu

Session A5
Topic: Topological Insulator
Chair: Xufeng Kou
A20
8:00 - 8:25 AM Room A June 21
<i>Spin texture of flatten Dirac-cone surface state on W(110)</i>
Koji Miyamoto, Taichi Okuda, Henry Wortelen, Markus Donath
A21
8:25 - 8:45 AM Room A June 21
<i>Chiral modes of topological semimetals under magnetic field</i>
Xiao-Xiao Zhang
A22
8:45 - 9:10 AM Room A June 21
<i>Spin texture and spin injection in a 3D topological insulator</i>
Weimin Chen, Y.Q. Huang, I.A. Buyanova, Y.X. Song, S.M. Wang
A23
9:10 - 9:35 AM Room A June 21
<i>Two dimensional topological insulators: progress and prospects</i>
Liangzhi Kou
A24
9:35 - 10:00 AM Room A June 21
<i>Charge-current induced spin polarization in BiSbTeSe₂ topological insulators</i>
Fan Yang, Subhamoy Ghatak, A. A. Taskin, Yoichi Ando, Yuichiro Ando, Masashi Shiraishi, Kouji Segawa, Yasushi Kanai, Kazuhiko Matsumoto, Achim Rosch

Conference Schedule

Session A6	
Topic: Topological Insulator	
Chair: Weimin Chen	
A25	
10:20 - 10:45 AM Room A June 21	
<i>Novel Topological Phase with a Zero Berry Curvature</i>	
Feng Liu, Katsunori Wakabayashi	
A26	
10:45 - 11:10 AM Room A June 21	
<i>2D materials-assisted fiber device as a novel nonlinear optical platform for multiwavelength ultrafast photonics</i>	
Bo Guo	
A27	
11:10 - 11:35 AM Room A June 21	
<i>Quantum phase transitions and order parameters of a topological insulator</i>	
Yanchao Li	
A28	
11:35 - 12:00 PM Room A June 21	
<i>One-dimensional edge states with spin splitting in bismuth</i>	
Akari Takayama, T. Sato, S. Souma, T. Oguchi, and T. Takahashi	
A29	
12:00 - 12:25 PM Room A June 21	
<i>Magnetic Topological Insulators and Their Heterostructures</i>	
Kang L. Wang, Xufeng Kou, Lei Pan, Qinglin He, Yabin Fan	

Session A7	
Topic: Nanotechnology for Solar Energy Collection and Conversion	
Chair: Yutaka Takaguchi	
A30	
14:00 - 14:25 PM Room A June 21	
<i>Green semiconductor vertical-cavity surface-emitting lasers based on quantum dots</i>	
Bao-Ping Zhang	
A31	
14:25 - 14:50 PM Room A June 21	
<i>Titanium Dioxide Films with Pure Anatase Phase Synthesized by Mist Chemical Vapour Deposition</i>	

Conference Schedule

Chaoyang Li, Qiang Zhang, Lilin Xie
A32
14:50 - 15:15 PM Room A June 21
<i>Tuning solar absorbance and reflection of high-temperature solar spectrally selective surfaces</i>
Feng Cao, Qian Zhang, Zhifeng Ren
A33
15:15 - 15:40 PM Room A June 21
<i>Broadband Optical Absorption Based on Plasmonic Nanostructures</i>
Qiang Li, Min Qiu

Session A8
Topic: General
Chair: Chaoyang Li
A34
16:00 - 16:25 PM Room A June 21
<i>Unsteady flow and heat transfer of MHD nano-liquid thin film over a stretching sheet under thermocapillarity effect</i>
Yan Zhang, Min Zhang, Yu Bai
A35
16:25 - 16:50 PM Room A June 21
<i>Focusing and Separating Diamagnetic Microparticles with Multiphase Ferrofluids</i>
Cheng Wang, Ran Zhou
A36
16:50 - 17:15 PM Room A June 21
<i>Semiconductor materials with open nanostructures for solar light-driven water splitting</i>
Changlong Chen
A37
17:15 - 17:40 PM Room A June 21
<i>H₂-evolving SWCNT Photocatalysts for Effective Use of Solar Energy</i>
Yutaka Takaguchi, Kiki Kurniawan, Noritake Murakami, Yuto Tango, Takumi Izawa, Kakeru Nishikawa, Ken Watanabe, Hideaki Miyake, Tomoyuki Tajima
A38

Conference Schedule

17:40 - 18:05 PM Room A June 21
<i>One-Dimensional Nanomaterials for Energy Storage</i>
Liqiang Mai

Session B5
Topic: Nanostructured Photocatalysts and Their Applications
Chair: Weining Wang
B19
8:00 - 8:25 AM Room B June 21
<i>Photocatalytic elimination of organic chemicals and aerosol-associated influenza virus infectivity in the air</i>
Kimiyasu Shiraki , Hiroshi Yamada, Yoshihiro Yoshida, Ayumu Ohno, Teruo Watanabe, Takafumi Watanabe, Hiroyuki Watanabe, Hidemitsu Watanabe, Masao Yamaguchi, Fumio Tokuoka, Shigeatsu Hashimoto, Masakazu Kawamura, and Norihisa Adachi
B20
8:25 - 8:50 AM Room B June 21
<i>Highly effective ZnO based nanoparticles in organic dyes removal</i>
Swee-Yong Pung
B21
8:50 - 9:15 AM Room B June 21
<i>Nanostructured TiO₂ with oxygen vacancies for the decomposition of organics</i>
Chiaki Terashima
B22
9:15 - 9:40 AM Room B June 21
<i>TiO₂-C hybrid aerogel photocatalysts for methylene blue degradation</i>
Rui Zhang , Xia Shao
B23
9:40 - 10:05 AM Room B June 21
<i>Highly efficient visible-light-driven BiVO₄-based semiconductor photocatalysts</i>
Qizhao Wang

Session B6
Topic: Nanostructured Photocatalysts and Their Applications
Chair: Kimiyasu Shiraki
B24
10:20 - 10:45 AM Room B June 21

Conference Schedule

<i>Highly Concentrated CO Evolution for Photocatalytic Conversion of CO₂ by H₂O as an Electron Donor</i>
Kentaro Teramura , Kazutaka Hori, Yosuke Terao, Hiroyuki Tatsumi, Zeai Huang, Shoji Iguchi, Zheng Wang, Hiroyuki Asakura, Saburo Hosokawa, Tsunehiro Tanaka
B25
10:45 - 11:10 AM Room B June 21
<i>Efficient Nanocatalysts for Solar-Energy-Driven Photocatalytic CO₂ Reduction</i>
Yun-Xiang Pan
B26
11:10 - 11:35 AM Room B June 21
<i>New Heterogeneous Photocatalysts Designed for Water Oxidation and CO₂ Reduction</i>
Kazuhiko Maeda
B27
11:35 - 12:00 PM Room B June 21
<i>Facile Development of Nanostructured Photocatalysts for CO₂ Capture and Conversion</i>
Weining Wang
Session B7
Topic: Nanostructured Photocatalysts and Their Applications
Chair: Giuseppina Cerrato
B28
14:00 - 14:25 PM Room B June 21
<i>Low Dimensional Materials Used for Lithium / Sodium ion Battery Anode</i>
Meicheng Li , Gaoxiang Wu, Xiaodan Li, Jiewei Chen, Yanjiao Guo, Bi Luo, Bing Jiang, Lihua Chu
B29
14:25 - 14:50 PM Room B June 21
<i>Noble-metal free Metal sulphides as highly efficient visible light driven photocatalysts for H₂ production from H₂S</i>
Ying Zhou , Meng Dan, Arvind Prakash
B30
14:50 - 15:15 PM Room B June 21
<i>Photoelectrocatalytic Production of Solar Fuels from Water and CO₂</i>
Hyunwoong Park
B31
15:15 - 15:40 PM Room B June 21

Conference Schedule

Significant photocatalytic enhancement via strengthening interface with TiO₂ by carboxyl-functionalized conjugated polymers

Yi Dan

Session B8

Topic: Nanostructured Photocatalysts and Their Applications

Chair: Yi Dan

B32

16:00 - 16:25 PM Room B June 21

Ag nano-doping onto microsized TiO₂: a challenge for enhancing the photocatalytic abatement of air pollution under visible light

Giuseppina Cerrato, C. Bianchi, M. Stucchi, V. Capucci

B33

16:25 - 16:50 PM Room B June 21

Functionalized graphene with both physical and chemical adsorptions of charges for high-performance supercapacitors

Jinzhang Liu, Yi Zhao

B34

16:50 - 17:15 PM Room B June 21

Enhanced Catalysis by Optical Nanoantenna Reduced on Transition Metal Dichalcogenide

Donald K. Roper, Jeremy Dunklinb, Alexander O'Brien

B35

17:15 - 17:40 PM Room B June 21

Synergistic effect of MoS₂/TiO₂ heterostructures with enhanced photo- and electro-catalytic performance

Junguang Tao, Lixiu Guan, Guifeng Chen, Xiaolin Song, Hong Wang

Session A9

Topic: Terahertz Technology

Chair: Genquan Han

A39

8:00 - 8:25 AM Room A June 22

Terahertz filter and demultiplexer with photonic crystal waveguide

Hongjun Liu, Zhaolu Wang, Nan Huang, Jing Han

A40

8:25 - 8:50 AM Room A June 22

Conference Schedule

<i>THz radiation based on fiber-integrated photo-conductive antennas and mode-locked Yb-doped fiber laser</i>
Min Yong Jeon , Ji Su Kim, Hyun Moon Yang, Sang-Pil Han, Kiwon Moon, Kyung Hyun Park
A41
8:50 - 9:15 AM Room A June 22
<i>Generation and Detection of Terahertz Radiation from Laser-Plasmas</i>
Xiao-Yu Peng , Hai-Wei Du
A42
9:15 - 9:40 AM Room A June 22
<i>The fascinating split-ring-resonators: progress in design, fabrication and applications of terahertz metamaterials</i>
Mei Zhu
A43
9:40 - 10:05 AM Room A June 22
<i>Broadband terahertz absorber based on sinusoidally-patterned graphene</i>
Longfang Ye , Yao Chen
Session A10
Topic: Terahertz Technology
Chair: Xiao-Yu Peng
A44
10:20 - 10:45 AM Room A June 22
<i>Engineering rainbow trapping and releasing in ultrathin THz plasmonic graded metallic grating strip with thermo-optic material</i>
Genquan Han
A45
10:45 - 11:10 AM Room A June 22
<i>Micro-fabricated L-shape metasurface terahertz biosensor</i>
Jun Zhou
A46
11:10 - 11:35 AM Room A June 22
<i>Intensity and spectral changes in terahertz quantum cascade lasers induced by the injection of near-infrared optical pulses</i>
Yohei Sakasegawa , N. Sekine, S. Saito, A. Kasamatsu, I. Hosako, M. Ashida
A47

Conference Schedule

11:35 - 12:00 PM Room A June 22
<i>THz surface/Interface Emission spectroscopy and applications</i>
Xinlong Xu, Yuanyuan Huang, Lipeng Zhu

Session A11
Topic: Porous Carbon Materials
Chair: Zhangxiong Wu
A48
14:00 - 14:25 PM Room A June 22
<i>Design and electrochemical performance of nano-micro structured porous materials</i>
Yingke Zhou
A49
14:25 - 14:50 PM Room A June 22
<i>Molecular Insights into Electrical Double Layers in Graphene-Based Supercapacitors</i>
Guang Feng, Sheng Bi, Song Li, Nina Balke, Peter T. Cummings, Rui Qiao, Alexei A. Kornyshev
A50
14:50 - 15:15 PM Room A June 22
<i>Preparation of novel microporous organic frameworks</i>
Teng Ben
A51
15:15 - 15:40 PM Room A June 22
<i>Porous Carbons and Polymers for Gas Mixture Separation</i>
Yunfeng Zhao

Session A12
Topic: General
Chair: Teng Ben
A52
16:00 - 16:25 PM Room A June 22
<i>Controllable Synthesis of N-Doped and Dually Doped Mesoporous Carbons for Adsorption and Catalysis Applications</i>
Zhangxiong Wu
A53
16:25 - 16:50 PM Room A June 22

Conference Schedule

Accelerating the extracellular electron transfer of Shewanella oneidensis MR-1 by decorating cytochromes with carbon quantum dots and MWNTs

Peng Zhang, Jia Liu, Yujie Feng

A54

16:50 - 17:15 PM Room A June 22

Application of transition-metal dichalcogenides beyond general electronics

Yijin Zhang

Session B9

Topic: Nanostructured Photocatalysts and Their Applications

Chair: Yongchun Zhao

B36

8:00 - 8:25 AM Room B June 22

Nano Photocatalytic Materials Design Toward Small Molecular Hydrocarbons Oxidation

Zhiguo Yi

B37

8:25 - 8:50 AM Room B June 22

Ternary Nanostructured Photocatalysts for Photoelectrochemical Water Splitting

Meng Nan Chong, Yi Wen Phuan

B38

8:50 - 9:15 AM Room B June 22

Photocatalytic Degradation of Polybrominated Diphenyl Ethers on TiO₂-based composites

Heqing Tang, Nan Wang, Lihua Zhu, Ming Lei

B39

9:15 - 9:40 AM Room B June 22

One-dimensional nanoarrays for solar cells

Hao Wang

B40

9:40 - 10:05 AM Room B June 22

Full-spectrum photocatalysts with Near-infrared activity

Wenxia Liu, Wenwen Gao, Huabin Chen, Jun Chen

Session B10

Topic: Nanostructured Photocatalysts and Their Applications

Conference Schedule

Chair: Heqing Tang
B41
10:20 - 10:45 AM Room B June 22
<i>Nanowire-plasmonic photocatalysts and thermal emitters</i>
Thang Duy Dao, Tadaaki Nagao, Kai Chen, Shatoshi Ishii, Gui Han
B42
10:45 - 11:10 AM Room B June 22
<i>Van der Waals Oxide Heteroepitaxy for Transparent and Flexible Electronics</i>
Ying-Hao Eddie Chu
B43
11:10 - 11:35 AM Room B June 22
<i>N-doped graphene as highly-catalytic counter electrode in Dye-sensitized Solar Cells (DSSCs)</i>
Peng Zhai, Shien-Ping Feng
B44
11:35 - 12:00 PM Room B June 22
<i>CO₂ photocatalytic reduction using TiO₂ nanocrystals with coexposed {001} and {101} facets</i>
Yongchun Zhao, Zhuo Xiong, Ze Lei, Junying Zhang, Chuguang Zheng

Session B11
Topic: Nanotechnology for Magnetic Resonance Imaging
Chair: Renhua Wu
B45
14:00 - 14:25 PM Room B June 22
<i>Albumin-mediated Gold/Platinum Nanocomposites for Dual Mode CT/MR Imaging Applications</i>
Nengqin Jia, Wenjing Zhao, Zhiming Wang, Zhongyun Chu
B46
14:25 - 14:50 PM Room B June 22
<i>Manganese oxide-embedded iron oxide nanoparticles: An enhanced T₁-T₂ dual-modal contrast agent</i>
Chichong Lu, Jianmei Ma
B47
14:50 - 15:15 PM Room B June 22

Conference Schedule

<i>Tracking of stem cells with Magnetic Resonance Imaging</i>
Qun Zhao
B48
15:15 - 15:40 PM Room B June 22
<i>Surface passivation of magnetic nanoparticles via atomic layer deposition</i>
Rong Chen

Session B12
Topic: Nanotechnology for Magnetic Resonance Imaging
Chair: Qun Zhao
B49
16:00 - 16:25 PM Room B June 22
<i>Proteins promote cancer nanotheranostics</i>
Bingbo Zhang
B50
16:25 - 16:50 PM Room B June 22
<i>Nanoparticles in Magnetic Resonance Imaging</i>
Renhua Wu, Zhiwei Shen, Zhuozhi Dai

Poster Session
16:50 - 18:00 PM Room B June 22
<i>P1: Two color optical absorption in InAs/AlSb/GaSb quantum well</i>
Xiangfei Wei
<i>P2: Enhanced electrochemical energy storage of N-doped graphene by adsorbing molecules of hydrolyzed polyimide</i>
Yi Zhao, Jinzhang Liu
<i>P3: Gram-scale production of nanoporous graphene by Mg-thermoreduction of CS₂ for electrochemical energy storage</i>
Lu Sun, Jinzhang Liu, Yan Li
<i>P4: Novel Self-powered UV-Visible Photodetector with Fast Response and High Photosensitivity Employing Fe:TiO₂/n-Si Heterojunction</i>
Lin Sun, Chunrui Wang, Tao Ji
<i>P5: Quasi-Freestanding Monolayer Striped WS₂ with an Invariable Band Gap on Au(001)</i>
Min Hong, Yanfeng Zhang

Conference Schedule

P6: Continuous and high-efficient synthesis of graphene oxide based on modified hummers method

Xiaoshan Zhang, Tianjiao Huang, Chunyan Zhou, Yuwei Lan, Guangyao Jia, Hong Yang, Yilin Wang, Liya Zhou

P7: TBD

Tianjiao Huang

P8: Recent research in the continuous terahertz wave on nondestructive detection of carbon fibre composite

Tielin Lu, Chunxi Wang, Jingshui Zhang, Lingqin Kong