WILEY-Yellow Crane Tower Summit on Advanced Nanomaterials

Final Program

May 8th to May 11th, 2019 Wuhan, China

2019年5月8-11日 中国 武汉 武汉工程大学

Thursday, May 9th, 2019

Opening ceremony & Plenary talk

Room: 四教多功能报告厅

Chair: Wenxue Zhang (Wuhan Institute of Technology)		
9:00-9:15	Welcome Remarks and Opening ceremony	Cunwen Wang Wuhan Institute of Technology
9:15-9:30	Introduction to Wiley-Yellow Crane Tower Summit on Advanced Nanomaterials	Guangchen Xu
9:30-10:10	Structure Design and Performance Regulation of Electrochemical Energy Materials	Shi-Gang Sun Xiamen University
10:10-10:40	**Coffee Break and Group Photo**	
10:40-11:20	Nanotheranostic-Opportunities and Challenges	Xueji Zhang Shenzhen University, University of Science and Technology Beijing

Thursday, May 9th, 2019

Parallel sessions 1: (文科楼313)

Chair: Zhiyong Tang Session: Catalysts		
14:00-14:30	Control of synthesis of defects in catalysts for electrochemical reactions	Xiangdong Yao Griffith University
14:30-15:00	Layered Double Hydroxide Based Photocatalysts for Solar Fuels and Value-added Chemicals	Tierui Zhang Technical Institute of Physics and Chemistry, CAS
15:00-15:30	Unraveling the intimacy effect in bimetallic catalysts by designing well-defined spatially separated nanostructures via atomic layer deposition	Yong Qin Institute of Coal Chemistry, CAS
15:30-16:00	Microstructure effect of carbon fibers on the growth of SiC whiskers	Xuanke Li Wuhan University of Science and Technology
16:00-16:20	**Coffee Break**	
Chair: Xiangdong Yao Session: Metal-Organic Framework		
16:20-16:50	Metal-Organic Framework NanoComposite Materials	Fengwei Huo Nanjing Tech University
16:50-17:20	Nanoscale Metal-Organic Frameworks: Emerging Materials for Catalysis	Zhiyong Tang National Center for Nanoscience and Technology
17:20-17:50	Controlled CVD Synthesis and their Photodetection Performances of 2D Metal Dichalcogenides	Tianyou Zhai Huazhong University of Science and Technology
17:50-18:10	CVD Electrocatalysts And Their Electrochemical Properties	Xiujun Fan Shanxi University

Thursday, May 9th, 2019
Parallel sessions 2 : (文科楼 315)

Chair: Zhixiang Wei Session: Batteries / Fuel cells		
14:00-14:30	Developing New Chemistries for Redox Flow Batteries (AORFBs)	Tianbiao Leo Liu Utah State University
14:30-15:00	The Design of high-Performance Metal-Free Carbon-based Cathode Catalysts for Acidic Fuel Cells	Shun Wang Wenzhou University
15:00-15:30	风化壳淋积型稀土矿提取稀土进展	Ru-an Chi Wuhan Institute of Technology
15:30-16:00	Chlorinated Wide-Bandgap Donor Polymer Enabling Annealing Free Nonfullerene Solar Cells with the Efficiency of 11.5%	Zhitian Liu Wuhan Institute of Technology
16:00-16:20	**Coffee Break**	
Chair: Shun Wang Session: Solar Cells		
16:20-16:50	Organic Nanostructures for Flexible Solar Cells and Energy Storage Devices	Zhixiang Wei National Center for Nanoscience and Technology
16:50-17:20	Highly Efficient Conversion of Solar Energy	Dongsheng Xu Peking University
17:20-17:50	Synchrotron X-ray Scattering based Third Generation Solar Cell Studies	Xinhui Lu The Chinese University of Hong Kong
17:50-18:10	Piezo/Triboelectric Potential Modulated Semiconductor Devices	Qijun Sun Beijing Institute of Nanoenergy and Nanosystems, CAS

Thursday, May 9th, 2019
Parallel sessions 3: (文科楼413)

Chair: Fei Wei Session: Energy Storage Devices		
14:00-14:30	One Dimensional Nanomaterials for Emerging Energy Storage	Liqiang Mai Wuhan University of Technology
14:30-15:00	Two-dimensional Nanosheets for Microscale Energy Storage Devices	Zhong-Shuai Wu Dalian Institute of Chemical Physics, CAS
15:00-15:30	Applications of Plasma Technology in Electrochemical Energy Conversion and Storage Materials	Wenjun Zhang City University of Hong Kong
15:30-15:50	Highly-Efficient Dendritic Cable Electrodes for Fabric-type Energy Harvesting and Storage Devices	Xing Fan Chongqing University
16:00-16:20	**Coffee Break**	
Chair: Paula Colavita Session: Diamond Application		
16:20-16:50	Diamond micro-optics: fabrication and applications of diamond microlenses	Hongxing Wang Xi'an Jiaotong University
16:50-17:20	Colloidal boron-doped diamond (BDD) atomic force-scanning electrochemical microscopy (AFM-SECM) probes	Christine Kranz Ulm University, Germany
17:20-17:50	Simulation of diamond surface electronic properties	Karin Larsson University of Uppsala, Sweden
17:50-18:10	Diamond supercapacitors	Siyu Yu Southwest University

Thursday, May 9th, 2019

Parallel sessions 4: (文科楼117)

Chair: Jin Zhang Session:Material Structure and Design Ⅰ		
14:00-14:30	Hollow Multi-shelled Structures: Synthesis and Applications	Jian Qi Institute of Process Engineering, CAS
14:30-15:00	Well-defined Graphene-based Nanomaterials for Energy Applications	Linjie Zhi National Center for Nanoscience and Technology
15:00-15:30	Controlled mass production of 2D materials and their applications in optoelectronics	Bilu Liu Tsinghua-Berkeley Shenzhen Institute, Tsinghua University
15:30-16:00	动态键驱动功能高分子材料	Guanjun Chang Southwest University of Science and Technology
16:00-16:20	**Coffee Break**	
Chair: Lei Fu Session: Nano-Carbon		
16:20-16:50	Growth of (n, n-1) Family Semiconducting Carbon Nanotubes	Jin Zhang Peking University
16:50-17:20	Synthesis of Structurally Defined Graphene Nanoribbons with Excellent Liquid-Phase Dispersibility	Yiyong Mai Shanghai Jiao Tong University
17:20-17:50	Structure control, Mass Production and Applications of Well Aligned Carbon Nanotubes	Fei Wei Tsinghua University
17:50-18:10	A Nanosized CoNi Hydroxide@Hydroxysulfide Core-Shell Heterostructure for Enhanced Oxygen Evolution	Bin Wang Shaanxi Normal University

Friday, May 10th, 2019

Parallel sessions 1: (文科楼313)

Chair: Yifu Yu Session: Catalysis Applications		
8:30-9:00	Investigation of heterogeneous molecular structure for electrocatalysis applications	Xin Wang Nanyang Technological University
9:00-9:30	Harnessing chemical and structural effects in carbon electrocatalysis: insights from model systems	Paula Colavita Trinity College Dublin
9:30-10:00	Tuning Pores of Polymeric Micelle-Templated Mesoporous Pd Nanoparticles for Superior Electrocatalytic Performances	Cuiling Li Beijing Institute of Technology
10:00-10:20	Controlled Self-assembled LDH-ns/Reduced rGO-ns Nanohybrids Based on Solid Phase Exfoliation Strategy as an Excellent Electrocatalyst for the Oxygen Evolution Reaction	Ping Zhang Southwest University of Science and Technology
10:20-10:40	**Coffee Break**	
Chair: Weihua Huang Session: Biomedical Application Ⅰ		
10:40-11:10	A SERS Optophysiological Probe for the Real-Time Mapping and Simultaneous Determination of the Carbonate Concentration and pH Value in a Live Mouse Brain	Yang Tian East China Normal University
11:10-11:40	Design strategy of Nanodiamond-based Bioprobes: Fabrication of Theranostic Integration System for Inhibiting Tumor Metastasis and Diagnostic Imaging	Jinfang Zhi Technical Institute of Physics and Chemistry, CAS
11:40-12:10	One-pot synthesis of AuNCs-MnO2 nanoflakes with peroxidase-like characteristics for pyrophosphatase detection based on Exonuclease III and Cu2+-DNAzymes dual-amplified strategy	Shengfu Wang Hubei University
12:10-12:30	基于三维网络材料的肿瘤标志物分离检测研究	Min Xie Wuhan University

Friday, May 10th, 2019

Parallel sessions 2: (文科楼315)

Chair: Xinhui Lu Session: Lithium Ion Batteries		
8:30-9:00	Carbon for Reliable Lithium-Sulfur Batteries	Feng Li Institute of Metal Research, CAS
9:00-9:30	Li Metal Anode Protection in Safe Batteries	Qiang Zhang Tsinghua University
9:30-10:00	储能用低成本钠离子电池研究与开发	Shulei Chou University of Wollongong
10:00-10:20	Development and Optimization of Electrode/Electrolyte Materials for High Energy Rechargeable Li Metal Batteries	Shuhong Jiao University of Science and Technology of China
10:20-10:40	**Coffee Break**	
Chair: Zhihui Dai Session: Sensor Interface Ⅰ		
10:40-11:10	Framework nucleic acids-guided molecular sensing and imaging	Chunhai Fan Shanghai Jiao Tong University
11:10-11:40	基于固态纳米孔道的生物分子检测	Fan Xia China University Of Geosciences, Wuhan
11:40-12:10	MicroRNA Nanobiosensor and Nanotheranostic	Haifeng Dong University of Science & Technology Beijing
12:10-12:30	A novel electrochemiluminescence biosensor for detection of trichlorfon with MIL-53(Al)@CdS QDs and SiO_2@AuNPs for signal amplification	Xuecai Tan GuangXi University for Nationalities

Friday, May 10th, 2019

Parallel sessions 3: (文科楼413)

Chair: Xuechang Zhou Session:Energy Storage Materials		
8:30-9:00	Flexible Energy Storage: Zinc Based Batteries	Chunyi Zhi City University of Hong Kong
9:00-9:30	Metal Organic Framework Derived Hollow Nanoarrays for Flexible Energy Storage and Conversion	Cao Guan Northwestern Polytechnical University
9:30-10:00	Energy Storage Mechanism of Sulfur-Carbon Bridged Materials	Xiaobo Ji Central South University
10:00-10:20	锌二氧化碳电池纳米电催化材料合成	Yaobing Wang Fujian Institute of Research on the Structure of Matter, CAS
10:20-10:40	**Coffee Break**	
Chair: Xiaobo Ji Session: Phase Engineering		
10:40-11:10	Phase Engineering of Novel Nanomaterials	Hua Zhang City University of Hong Kong, Nanyang Technological University
11:10-11:40	Liquid metals: From marbles to circuits	Xuechang Zhou Shenzhen University
11:40-12:10	Nitric acid and Ammonia Electrosynthesis	Yifu Yu Tianjin University
12:10-12:30	Engineering the heterointerfaces for inducing high-valence bimetallic sites towards efficient oxygen electrocatalysis	Xiaopeng Han Tianjin University

Friday, May 10th, 2019

Parallel sessions 4: (文科楼117)

Chair: Yiyong Mai Session:Material Structure and Design Ⅱ		
8:30-9:00	From graphite to graphene: application to energy storage and conversion	Feiyu Kang Tsinghua University
9:00-9:30	Sub-1 nm Ultrathin Nanocrystals	Xun Wang Tsinghua University
9:30-10:00	Low-cost and Durable Electrocatalysts for PEM Fuel Cells	Qing Li Huazhong University of Science and Technology
10:00-10:20	Mesoporous Hollow Cu-Ni Alloy Nanocage from Core-Shell Cu@Ni Nanocube for Efficient Hydrogen Evolution Reaction	Zhenxing Li China University of Petroleum, Beijing
10:20-10:40	**Coffee Break**	
Chair: Feiyu Kang Session:Photo-electron/ Photocatalysis		
10:40-11:10	Upconversion Nanostructure with Quantum Dots as Antenna: Improved Photoluminescence and PDT Efficiency	Zhihong Liu Wuhan University
11:10-11:40	Semiconductor Nanostructures for High-Performance Electronic and Optoelectronic Devices	Johnny C. Ho City University of Hong Kong
11:40-12:10	Molecular Design towards Single-Molecule Devices	Hao-Li Zhang Lanzhou University
12:10-12:30	Design and Modification of Two-Dimensional Photocatalysts and Their Enhanced Photocatalytic Performance for Pollutant Degradation	Gaoke Zhang Wuhan University of Technology

Friday, May 10th, 2019

Parallel sessions 1: (文科楼313)

Chair: Yang Tian Session: Biomedical ApplicationⅡ		
14:00-14:30	Efficient and Selective Uptake of TcO4- by Cationic Metal-Organic Framework Material	Lin Zhu Southwest University of Science and Technology
14:30-15:00	Nanoparticles of Fluorescent and Photovoltaic Molecules for Biomedical Applications	Chun-Sing Lee City University of Hong Kong
15:00-15:30	Developing diamond based quantum sensing for applications in condense matter physics and biomedicine	Quan Li The Chinese University of Hong Kong
15:30-15:50	Phospholipid Self-Assembly Based Artificial cells	Xiaojun Han Harbin Institute of Technology
15:50-16:10	**Coffee Break**	
Chair: Quan Li Session: Biomedical ApplicationⅢ		
16:10-16:40	High Efficient Tumor Therapeutic Technique Based on Water Soluble Metallofullerene Derivatives	Chunru Wang Institute of Chemistry, CAS
16:40-17:10	Nanomaterials-Based Electrochemical Sensors for Real Time Monitoring at Cellular and Subcellular Levels	Wei-Hua Huang Wuhan University
17:10-17:40	A Field Effect Transistor Modified with Reduced Graphene Oxide for Immunodetection of Ebola Virus	Guo-Jun Zhang Hubei University of Chinese Medicine
17:40-18:00	Inhibitory effects of several functional nanomaterials on the proliferation of porcine pseudorabies virus and porcine reproductive and respiratory syndrome virus	Jiangong Liang Huazhong Agricultural University

18:00-18:20	纳米材料在禽蛋安全检测中的应用	Zhaoxia Cai Huazhong Agricultural University

Friday, May 10th, 2019

Parallel sessions 2: (文科楼315)

Chair: Haifeng Dong Session: Sensor Interface Ⅱ		
14:00-14:30	Regulation of surface and interface structure of nanomaterials to construct sensitive biosensor	Zhihui Dai Nanjing Normal University
14:30-15:00	Biodegradable Hypocrellin-Based Nanomaterials as a Near-Infrared Light-driven Theranostics	Pengfei Wang Technical Institute of Physics and Chemistry, CAS
15:00-15:30	电催化材料的多维度微观结构调控	Faquan Yu Wuhan Institute of Technology
15:30-15:50	基于功能化MOF材料的电化学/血糖仪双响应DNA甲基转移酶传感器	Ying Chen Yangtze University
15:50-16:10	**Coffee Break**	
Chair: Zhihong Liu Session: Nano-structure		
16:10-16:40	Graphene Oxide: Green Synthesis and Membrane Applications	Wencai Ren Institute of Metal Research, CAS
16:40-17:10	Fabrication and applications of novel porous polymer and carbon materials	Dingcai Wu Sun Yat-sen University
17:10-17:40	钴基微/纳米结构负极材料的可控制备及其电化学性能	Guoyong Huang China University of Petroleum, Beijing
17:40-18:00	Fabrication of high-brightness silicon-vacancy color centers in diamond films: tetramethylsilane as a new dopant source	Bin Yang Institute of metal research, CAS
18:00-18:20	Highly efficient g-C_3N_4-based photo/electric-sensors	Jizhou Jiang Wuhan Institute of Technology

Friday, May 10th, 2019

Parallel sessions 3: (文科楼413)

Chair: Hua Wang Session: Perovskite		
14:00-14:30	PerovLight: Perovskite Materials for Nanophotonics and Optoelectronics	Qihua Xiong Nanyang Technological University
14:30-15:00	High Efficiency Thin Film Metal Halide Perovskite Light-emitting Diodes with Significantly Improved Light Extraction on Nanophotonic Substrate	Zhiyong Fan The Hong Kong University of Science and Technology
15:00-15:30	Perovskite optoelectronic devices hybridized with semiconductor nanopillar arrays	Zhifeng Huang Hong Kong Baptist University
15:30-15:50	Development of high-performance flexible supercapacitors and in-situ optical detection of their energy storage status	Wenjie Mai Jinan University
15:50-16:10	**Coffee Break**	
Chair: Zhitian Liu Session: Energy Storage Technology		
16:10-16:40	Molecular-based Design of Nanoporous Carbon Spheres for Energy Conversion and Storage	Jian Liu Dalian Institute of Chemical Physics, CAS; University of Surrey
16:40-17:10	The Way to Calcium-ion Energy Storage Technology	Yongbing Tang Shenzhen Institutes of Advanced Technology, CAS

17:10-17:40	Nature-Inspired Electrochemical Energy-storage Materials and Devices	Hua Wang Beihang University
17:40-18:00	Flexible supercapacitors based on carbon nanotube-MnO2 nanocomposite film electrode	Qiufan Wang South-Central Minzu University
18:00-18:20	Extraman Amine promotes Electrocatalytic Reduction of CO2 by Cobalt Tripyridine-Diamine at a Low Overpotential	Lin Chen Southwest University of Science and Technology

Friday, May 10th, 2019

Parallel sessions 4: (文科楼117)

Chair: Wencai Ren Session: Two-Dimensional Materials		
14:00-14:30	Desktop Fabrication of 2D and 3D Polymer Nanostructures with Scanning Probe Lithography	Zijian Zheng The Hong Kong Polytechnic University
14:30-15:00	Periodical Two-Dimensional Photonic-Plasmonic Au/TiOx Nanocavity Resonators for Photoelectrochemical Applications	Zhonghai Zhang East China Normal University
15:00-15:30	Interface Engineering on 1D ZnO Nanomaterials and Their Applications	Yue Zhang University of Science and Technology Beijing
15:30-15:50	纳米半导体光阳极驱动5-氨基四唑氧化偶联合成偶氮四唑化合物研究	Huichao He Southwest University of Science and Technology
15:50-16:10	**Coffee Break**	
Chair: Faquan Yu Session: Quantum Dots		
16:10-16:40	Synthesis, modification and application of quantum dots for multicolor fluorescent labeling and detection	Zhike He Wuhan University
16:40-17:10	Precise Synthesis of 2D Atomic Crystals @ Liquid Metal	Lei Fu Wuhan University
17:10-17:40	Synthesis and properties of ultrathin rare earth nanostructures	Yaping Du Nankai University
17:40-18:00	Artificial photosynthesis of ethanol using type-II g-C_3N_4/ZnTe heterojunction in photoelectrochemical CO_2 reduction system	Qinglong Wang Huazhong University of Science and Technology
18:00-18:20	A Universal Synthesis Strategy for Nitrogen-Doped Hierarchically Porous Carbon Materials with Single Fe Atoms as Efficient Electrocatalysts for Oxygen Reduction at Whole pH Values	Wenling Gu Central China Normal University

Saturday, May 11th, 2019

Plenary talk & Close Remarks

Room： 四教多功能报告厅

Chair: Jinyi Chen, Nianjun Yang		
9:00-9:30	Covalent and Noncovalent Chemistry for Nanocarbons: Biomedical Application and Structural Separation	Naoki Komatsu Kyoto University
9:30-10:10	Graphene Films and Membranes: Fabrication and Applications	Hui-Ming Cheng Institute of Metal Research, CAS; Tsinghua-Berkeley Shenzhen Institute, Tsinghua University
10:10-10:25	Publishing with Wiley	Muxian Shen
10:25-10:35	The award ceremony	**Muxian Shen, Jinyi Chen**
10:35-10:50	Close Remarks	Youjin Cheng Wuhan Institute of Technology