目录 Content

哈尔滨理工大学电气与电子工程学院简介

哈尔滨理工大学由原机械工业部所属的哈尔滨科学技术大学、哈尔滨电工学院和哈尔滨工业高等专科学校合并组建而成，实行中央与地方共建、以地方为主的管理体制。建校70多年来，学校认真贯彻党的教育方针，发展成为黑龙江省国内“双一流”建设高校，是省属规模最大的理工科大学，为我国装备制造业发展和黑龙江经济社会建设做出了重要贡献。学校坚持内涵建设与外延发展相结合的办学方针，不断拓宽国际间交流与合作渠道，现已与欧洲、美洲和亚太地区20余个国家的70余所国（境）外高水平大学和科研机构建立了长期稳定的合作关系，积极开展学生联合培养、教师学术交流及合作科学研究等实质性合作，不断提升学校的办学水平和综合实力。

哈尔滨理工大学电气与电子工程学院始于1950年东北电器工业高级职业学校电器科、电工材料科，是面向全国电气装备制造行业的科学研究、技术开发和人才培养需求而成立的工科学院。学院设有电气工程及其自动化、电子科学与技术和新能源材料与器件3个本科专业。学院师资力量雄厚，拥有中国工程院院士1人、外籍院士2人，国家杰出人才3人、“龙江学者”特聘及讲座教授4人、国家级优秀教师1人、享受国务院政府特殊津贴6人，形成了一支“思想统一、团结进取、积极向上、朝气蓬勃”的教师队伍。学院建有电介质工程省部共建国家重点实验室培育基地、工程电介质及其应用教育部重点实验室等国家部委和省级教学科研平台。围绕国家重大战略需求和行业技术发展要求，近五年承担国家科技支撑计划项目课题、国际合作项目、国家重点研发计划项目课题、国自然基金重点项目等国家级项目60余项，其他省部厅级项目及横向委托项目332项，在国家特高压交直流输电工程、抽水蓄能机组、新能源汽车电驱动系统等系列工程中发挥了重要作用。科研成果获省部级奖项10余项，授权国家发明专利153项，实用新型专利526项，专利转化8项，取得了丰硕的研究成果和社会经济效益。

School of Electrical and Electronic Engineering, HUST

Harbin University of Science and Technology (HUST) was established under the former Ministry of Machinery Industry, and implements a management system jointly built by the central and the local government (dominated by the local government). Over the past 70 years, the university has earnestly implemented the Party's educational policy and developed into a "Double First-Class" university in Heilongjiang Province and also the largest provincial science and engineering university. The School of Electrical and Electronic Engineering was established in 1950. It is an engineering school that was established to meet the needs of scientific research, technological development, and personnel training of the national electrical equipment manufacturing industry. The school has a strong faculty team, including 1 academician of the Chinese Academy of Engineering, 2 foreign academician, 3 national outstanding talents, and 4 distinguished and lecture professors of "Longjiang Scholar". Many scientific research platforms that are essential for the development of electric engineering have built, focusing on the critical challenges faced by nation and industry.

会议简介

交通电气化与储能技术的高速发展正在引领世界能源战略规划和产业技术变革。电气化交通与储能技术国际论坛是在“一带一路”背景下，由中国、俄罗斯、白俄罗斯、韩国和新加坡等多边国家学者围绕“双碳”战略目标下新能源材料与器件、电动交通工具、储能系统与装备等面临的机遇和挑战而展开的国际化深入交流。

为搭建学术交流、科研合作和产业应用发展平台，由哈尔滨理工大学和中国电工技术学会储能系统与装备专业委员会主办的“第三届电气化交通与储能技术国际论坛”将于2023年10月18-20日在哈尔滨万达文华酒店召开。论坛将召集包括电动交通工具中的电源技术与动力技术、新能源与电化学储能技术、电气装备绝缘系统与检测技术等领域的知名学者与企业专家，探讨当前共同关心的技术创新议题和最新研究成果，推动行业科技进步创新、人才培养水平与成果转化进程。

我们期待与会者们相聚冰城，共同营造一个高水平的学术交流氛围，推动电气化交通与储能技术领域的发展。

第三届电气化交通与储能技术国际论坛组委会

Conference Introduction

The rapid development of transportation electrification and energy storage technology is leading the world's energy strategic planning and industrial technology changes. To build a platform for academic exchanges and industrial applications, the 3rd International Forum on Electrified Transportation and Energy Storage Technology hosted by HUST and the Energy Storage Systems and Equipment Committee of China Electrotechnical Society will be held in October 19-20, 2023, at the Wanda Vista Hotel. The forum will discuss current issues and opportunities based on the state-of-the-art progress in electrochemical energy storage fields.

We are looking forward to the participants gathering in the ice city (Harbin) to create a high-level academic exchange platform and promote the development of electrified transportation and energy storage technologies.

Organization Committee

会议组织机构 (Conference Organization)

一、主办单位 / Organizer

哈尔滨理工大学

Harbin University of Science and Technology

中国电工技术学会储能系统与装备专业委员会

Energy Storage Systems and Equipment Committee, China Electrotechnical Society

二、承办单位 / Supporters

工程电介质及其应用教育部重点实验室

Key Laboratory of Engineering Dielectrics and Its Application, Ministry of Education

汽车电子驱动控制与系统集成教育部工程研究中心

Automotive Electronic Drive Control and System Integration Engineering Research Center, Ministry of Education

三、名誉主席 / Honorary Chair

黄 维 / Wei HUANG　蔡 蔚 / William CAI　申泽骧 / Ze Xiang SHEN　Sergey M. Aldoshin

四、会议主席 / Conference Chair

主　　席 / Chair：**陈庆国 / Qingguo CHEN**

执 行 主 席 / Executive Chair：**刘 骥 / Ji LIU　　陈明华 / Minghua CHEN**

五、组织委员会 / Organization Committee

主　　席 / Chair：**陈明华 / Minghua CHEN　张成明 / Chengming ZHANG**

副　主　席 / Vice Chair：**吴晓刚 / Xiaogang WU　冯 宇 / Yu FENG**

委　　员 / Committee Member：

Shouqiang KANG	Yang SHAO	Aleksei N. KUZNETSOV	Yingzhen LIU	Xiaohui PAN	Xinhui XIA
Linfeng SUN	Yingying WANG	Zhendong HUANG	Yulia LEKINA	Xin LIU	Ping HE
Fei DU	Zhiyu WANG	Dongyang SUN	Heng JIANG	Jiajun WANG	Xinpei GAO
Kai ZHU	Zhen LI	Caiping ZHANG	Yang JIN	Zhe ZHANG	Shuai DONG
Chunlai YU	Mingfei BAN	Tiandong ZHANG	Xiangyu ZHAO	He ZHANG	Weilin LI
Zhifeng ZHANG	Dajun TAO	Serguei V. SAVILOV	Bing TIAN	Jun JIANG	Jianfeng HONG
Guoming MA	Wenfu WEI	Zixuan XIANG	Yunhui MEI	Ming YANG	Fuping ZENG

参会须知

01 本会议手册旨在为代表们提供会议的相关信息，仅供会议期间参考使用。未尽事宜及日程变动，临时活动，请随时留意注册平台发布的通知。

02 为了配合研讨会活动管理规定，请佩戴代表证参加会议，请勿在会场内吸烟及大声喧哗，请将手机设置为静音模式。

03 报告时间：大会报告：25 分钟；主旨报告：20 分钟；邀请报告：20 分钟。

04 做分会场各类报告的参会代表请在上下午报告的前半小时将PPT拷贝到各会场的计算机中，组委会承诺不允许他人擅自复制PPT并在报告后及时删除

05 未经许可，请勿在会议期间和展览区域内进行任何形式的摄影和录像/录音。

06 请遵守作息时间和有关规定，提前 20 分钟进会场，并在指定区域就坐。

07 在分会场各报告时间剩余 2-3 分钟时，主持人将进行提示，请报告人在 1 分钟内结束报告，以保证最后 1-2 分钟时间用于提问。

08 会议代表凭会务组发放的餐券和胸牌用餐，餐券只能在大会指定的时间和地点使用，餐券遗失不补，结余券不退，请注意保管。

09 参会期间，请注意个人的人身财产安全，离开宾馆房间时请将贵重物品带离房间。

10 若因特殊情况提前离会，缴纳的注册费不予退还，敬请谅解。

哈尔滨天气情况预报

10.18 星期三	10.19 星期四	10.20 星期五
多云转晴，6~14℃	多云转晴，-1~11℃	晴，-3~6℃

Notice to Attendees

01	This conference manual is intended to provide delegates with relevant information about the conference and is intended for reference only during the conference. For matters not covered, schedule changes, and temporary activities, please pay attention to the notification by the conference committee.
02	To comply with the conference management regulations, please wear your representative card to attend the conference. Please do not smoke or talk loudly in the conference hall. Please set your mobile phone to silent mode.
03	Report time: Plenary Speech: 25 min; Keynote Talk: 20 min; Invited Report: 20 min.
04	Participants who make presentations copy the slides to the computers in each sub-forum before beginning. The Organizing committee promises that others will not be allowed to copy the slides without authorization and delete it in time after the presentation.
05	Please do not take any kind of photography and video / audio recording during the meeting and in the exhibition area without permission.
06	Please follow the schedule and relevant regulations, enter the venue 20 minutes in advance, and sit in the designated area.
07	When there are 2-3 minutes left for each presentation in the sub venue, the host will prompt the speaker to end the presentation within 1 minute to ensure that the last 1-2 minutes are used for questioning.
08	Representatives can dine with meal vouchers and representative card issued by the conference team. The meal vouchers will be validated at the designated time and place of the conference. Please keep them carefully.
09	During the conference, please pay attention to personal and property safety. When leaving the hotel room, please take care of all your belongs.
10	If you leave the conference early due to personal reasons, the registration fee cannot be refunded. We apologize for any inconvenience caused.

10.18 Wednesday	10.19 Thursday	10.20 Friday
Cloudy, 6~14°C	Cloudy，-1~11°C	Sunny，-3~6°C

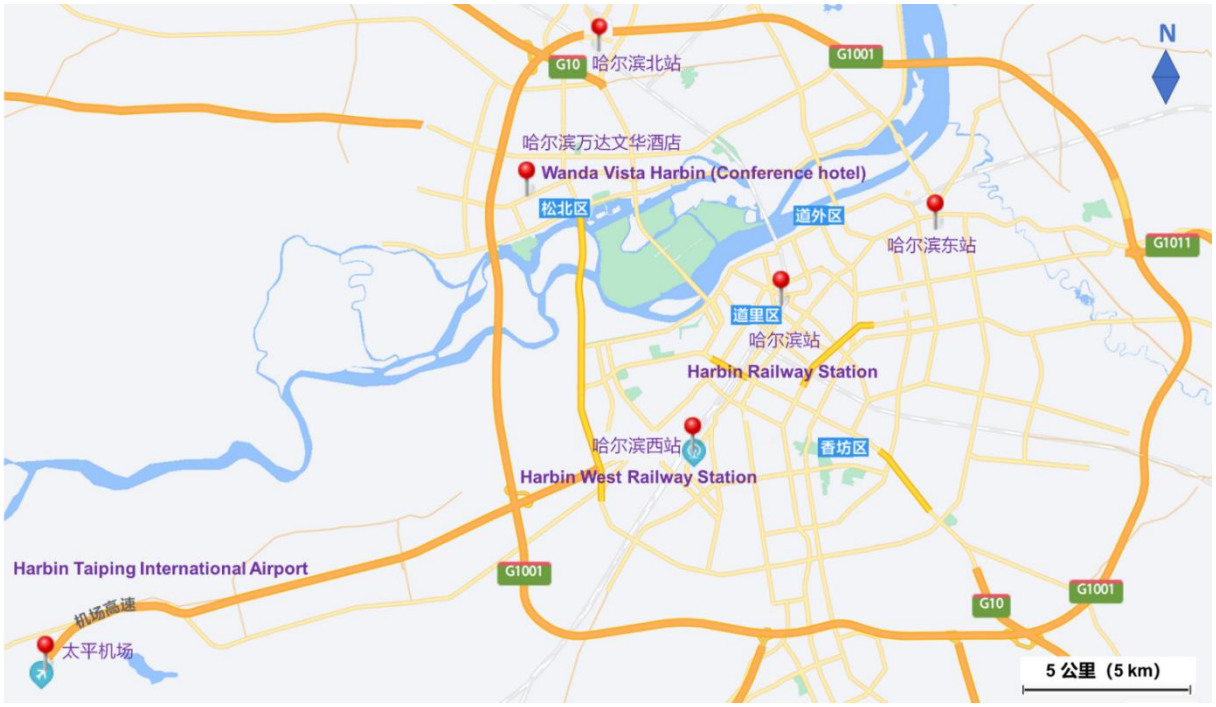
会议地点 (Conference Venue)

酒店：哈尔滨万达文华酒店

Hotel: Wanda Vista Hotel Harbin

地址：哈尔滨市松北区世茂大道87号

Address: No. 87, Shimao Avenue, Songbei District, Harbin, China



交通信息 (Traffic Guidance)

1. 哈尔滨太平国际机场（距离约 37公里）

出租车或者滴滴专车：费用约 120 元。
机场巴士：票价 20 元/人，候机楼一楼到达厅 3、4 号门。
机场大巴万达线（太平国际机场站上车—江北万达城站下车 38分钟）→出租车前往哈尔滨万达文华酒店（约 1.7 公里 5分钟）

2. 哈尔滨西站（距离约 17.6 公里）

出租车或者滴滴专车：费用约 50 元。
公交：哈西站（东广场）新区6号线（乘坐17站约51分钟，2-5元）到达万达文华酒店。
地铁：哈尔宾西站下车步行191米进入地铁3号线乘坐两站从工农大街1口出，步行760米到达医大一院群力分院，进入新区6号线乘坐10站到达万达文华酒店。

3. 哈尔滨站 (距离约 16.4 公里)

出租车或者滴滴专车：费用约 35 元。
公交：哈站（北广场）43路（乘坐23站约37分钟，2元）到达万达文华酒店公交站，步行105米到达万达文华酒店。

1. Harbin Taiping International Airport

Taxi: The cost from airport to the conference hotel is about 120 RMB. You can get taxi by following the signage at airport or using an APP called 'DiDi'.

Airport shuttle: 20 RMB per ticket. The ticket office can be found at the first floor of the terminal arrivals Hall; Airport shuttle are parked outside the gate 3 and 4.

2. Harbinxi Railway Station (or Harbin West Railway Station)

Taxi: The cost from Harbin West Railway Station to the conference hotel is about 50 RMB. You can get taxi by following the signage at the station or using an APP called 'DiDi'.

Bus: Taking New District Line 6 (bus) at East Square of Harbin West Railway Station can arrive the conference hotel bus station (2-5 RMB per ticket, using about 51 min), departs every 25 minutes. Then walk about 105 meter to arrive the conference hotel.

Metro: Take Metro Line 3 to Gong Nong street; Then walk to The First Affiliated Hospital of Harbin Medical University and take New District Line 6 (bus) to the conference hotel.

3. Harbin Railway Station

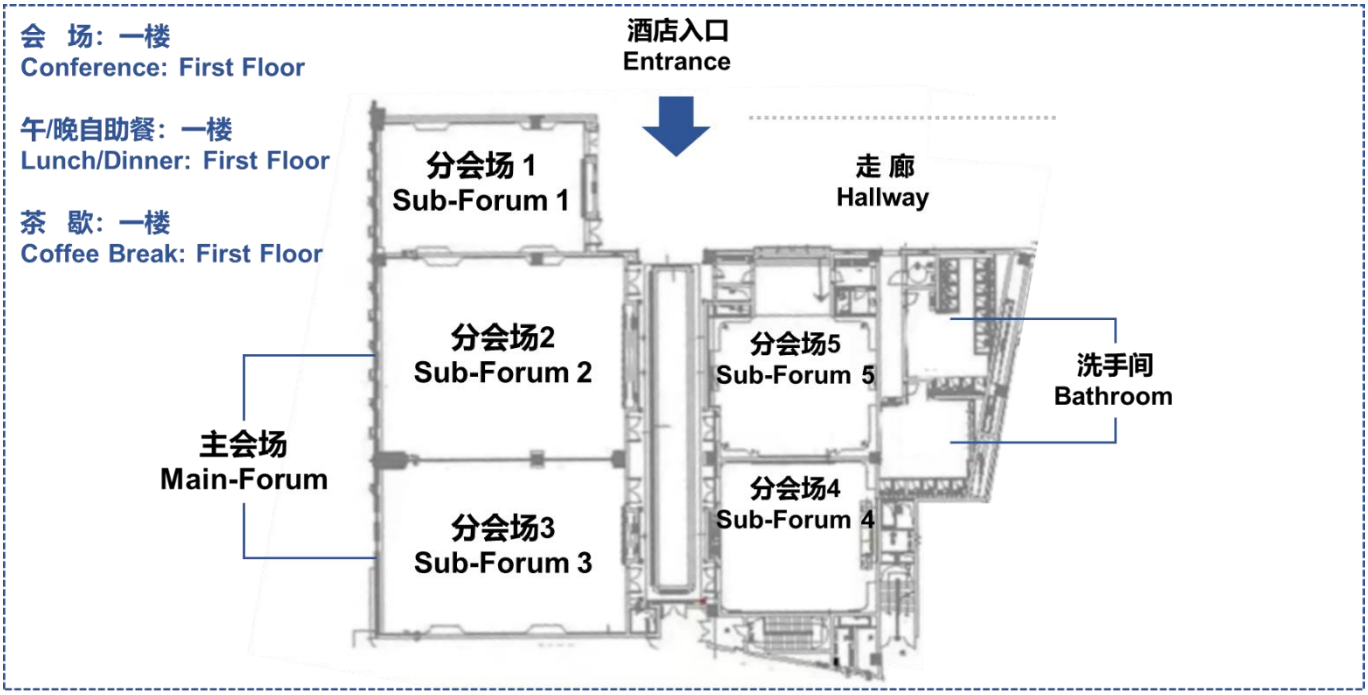
Taxi: The cost from Harbin Railway Station to the conference hotel is about 35 RMB. You can get taxi by following the signage at the station or using an APP called 'DiDi'.

Bus: Taking Line 43 (bus) at North Square of Harbin Railway Station can arrive the conference hotel bus station. Then walk about 105 meter to arrive the conference hotel.

会场平面图 (Floorplan of the Venue)

万达文华酒店一层

First Floor of Wanda Vista Hotel



万达文华酒店周边地图

Local Map Around Wanda Vista Hotel

会议总日程 General Conference Agenda

一、会议日程 Conference Agenda

2023年10月18日：会议注册

October 18, 2023: Conference Registration

2023年10月19-20日：学术报告

October 19-20, 2023: Academic Presentation

二、会议注册 Conference Registration

时间：2023年10月18日

Time: October 18, 2023

地点：哈尔滨市松北区世茂大道87号万达文华酒店

Address: No. 87, Shimao Avenue, Songbei District, Harbin

三、分会安排及召集人 Sub-Forum and Chair

分会安排 (Sub-Forum)	召集人 (Convener)	地 点 (Hall)
开幕式+大会报告 Opening Ceremony and Plenary Speech	陈明华 Minghua CHEN	多功能厅2+3 Function Room 2 and 3
分论坛1：新能源材料与器件 Sub-Forum 1: New Energy Materials and Devices	刘欣 Xin LIU	多功能厅1 Function Room 1
分论坛2：高比能高安全电池技术 Sub-Forum 2: High-Energy and High-Safety Batteries	陈 桢 Zhen CHEN	多功能厅2 Function Room 2
分论坛3：电动交通动力技术 Sub-Forum 3: Power Technology in Electric Transportation	张成明 Chengming ZHANG	多功能厅3 Function Room 3
分论坛4：电动交通电源技术 Sub-Forum 4: Power Source for Electric Transportation	吴晓刚 Xiaogang WU	多功能厅4 Function Room 4
分论坛5：电气装备绝缘与监测技术 Sub-Forum 5: Insulation and Testing Technology for Electrical Equipments	冯 宇 Yu FENG	多功能厅5 Function Room 5

四、会议简要日程 Brief Agenda

日 期 (Date)	时 间 (Time)	会 议 (Forum)
10月18日星期三 Wed., Oct. 18	14:00-22:00	**注册报道** Registration
	18:30-20:30	**晚　餐** Dinner
开幕式及主论坛 Opening Ceremony and Main Forum		
10月19日星期四 Thur., Oct. 19	08:20-08:50	**开幕式、合影** Opening Ceremony and Photograph
	08:50-10:05	**大会报告** Plenary Speech
	10:05-10:20	**茶　歇** Coffee Break
	10:20-12:00	**主旨报告** Keynote Talk
	12:00-14:00	**午　餐** Lunch Break
	14:00-15:20	**主旨报告** Keynote Talk
	15:20-15:40	**茶　歇** Coffee Break
	15:40-17:00	**主旨报告** Keynote Talk
分论坛 Sub-Forum		
10月20日星期五 Fri., Oct. 20	08:30-11:50	**#1：新能源材料与器件** New Energy Materials and Devices
	08:30-11:50	**#2：高比能高安全电池技术** High-Energy and High-Safety Batteries
	08:30-11:30	**#3：电动交通动力技术** Power Technology in Electric Transportation
	08:30-11:30	**#4：电动交通电源技术** Power Source for Electric Transportation
	08:30-11:30	**#5：电气装备绝缘与监测技术** Insulation and Testing Technology for Electrical Equipments

会务工作组 Conference Working Group

会场协调 Conference Coordination	
会议安排 Conference Arrangements	**负责人 Coordinator**
开幕式及大会报告 Opening Ceremony and Plenary Speech	刘 欣 Xin LIU
分论坛1：新能源材料与器件 Sub-Forum 1: New Energy Materials and Devices	刘 欣 Xin LIU
分论坛2：高比能高安全电池技术 Sub-Forum 2: High-Energy and High-Safety Batteries	张 骁 Huang ZHANG
分论坛3：电动交通动力技术 Sub-Forum 3: Power Technology in Electric Transportation	张成明 Chengming ZHANG
分论坛4：电动交通电源技术 Sub-Forum 4: Power Source for Electric Transportation	吴晓刚 Xiaogang WU
分论坛5：电气装备绝缘与监测技术 Sub-Forum 5: Insulation and Testing Technology for Electrical Equipments	冯 宇 Yu FENG

事务协调 Transaction Coordination		
事务安排 **Transaction Arrangement**	**负责人** **Coordinator**	**联系方式** **Tel.**
会议总联系人 General Coordination	李会华 Huihua LI	18737196172
注册 Registration	张家伟 Jiawei ZHANG	18246113802
缴费及发票 Payment and Invoice	刘 欣 Xin LIU	15765875621
住宿与接待 Accommodation and Reception	张 骁 Huang ZHANG	18601738447
会场设备 Venue Equipments	李 誉 Yu LI	13124501781

开幕式及大会报告日程表

Opening Ceremony and Conference Agenda

时 间/Time：10 月 19 日/ October 19, 08:20-17:00　　会场地点/Location：万达文华酒店/Wanda Vista

时 间 Time	活 动 Activities	
	开幕式 Opening Ceremony	
08:20-08:50	开幕式、合 影 Opening the Conference and Photograph	
	大会报告 Plenary Speech	
	主持人：陈庆国 / Chair: Qingguo CHEN	
08:50-09:15	黄 维 / Wei HUANG 厚植关键根部技术，打造柔性电子强国 Recent Advances in Flexible Optoelectronics	西北工业大学 Northwestern Polytechnical University
09:15-09:40	蔡 蔚 / William CAI 电动化车辆的先进电机系统和电驱动总成 Advanced e-Machine Systems and e-Powertrains for Vehicle Electrification	哈尔滨理工大学 Harbin University of Science and Technology
09:40-10:05	申泽骧 / Ze Xiang SHEN Graphene in Energy Storage: From Fundamental Study to Applications and Enterprise	哈尔滨理工大学 Harbin University of Science and Technology
10:05-10:20	茶 歇 Coffee Break	
	主持人：蒋 凯 / Chair: Kai JIANG	
10:20-10:40	肖成伟 / Chengwei XIAO 动力电池技术发展现状及趋势 Challenges and Prospects on Power Batteries	中国电子科技集团公司第十八研究所 No.18 Institute, China Electronics Technology Group Corporation
10:40-11:00	吴广宁 / Guangning WU 高速列车大功率弓网受流的关键技术及展望 Key Technology and Prospect of High-Power Current Receiving of Pantograph-Catenary System in High Speed Train	西南交通大学 Southwest Jiaotong University
11:00-11:20	刘 雷 / Lei LIU 单原子尺度精准的智能制造技术：半导体点缺陷的单体表征与控制 Intelligent Manufacturing Technology at Single Atomic Scale: Monomer Characterization and Control of Semiconductor Point Defects	中国科学院长春光机所 Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences

11:20-11:40	于　霆 / Ting YU 二维材料的原位表征及光电应用 Two-Dimensional Materials: In-Situ Characterization and Potential Optoelectronic Application	武汉大学 Wuhan University
11:40-12:00	霍峰蔚 / Fengwei HUO Design and Application of Leather Electronics	南京工业大学 Nanjing Tech University
	午　餐 Lunch Break	
	主持人：陈明华 / Chair: Minghua CHEN	
14:00-14:20	蒋　凯 / Kai JIANG 先进电工材料与储能技术 Advanced Electric Materials and Energy Storage Technologies	华中科技大学 Huazhong University of Science and Technology
14:20-14:40	倪振华 / Zhenhua NI 二维材料界面调控与光电器件 Interface Regulation of 2D Materials and Optoelectronic Devices	东南大学 Southeast University
14:40-15:00	陈立宝 / Libao CHEN 三维结构锂硼复合负极的研究 3D LiB Composite Anode	中南大学 Central South University
15:00-15:20	王　凯 / Kai WANG 高比能混合型超级电容器关键技术研究 Study on Key Technology for Hybrid Supercapacitors	中国科学院电工研究所 Institute of Electrical Engineering, Chinese Academy of Sciences
15:20-15:40	茶　歇 Coffee Break	
	主持人：倪振华 / Chair: Zhenhua NI	
15:40-16:00	夏　晖 / Hui XIA 锰基正极材料结构调控用于电化学储能 Manganese-based Cathode Materials for Electrochemical Energy Storage	南京理工大学 Nanjing University of Science and Technology
16:00-16:20	Aleksei N. KUZNETSOV Design of New Solid Compounds and Materials based on Ordered Metallic Fragments	莫斯科国立大学 Lomonosov Moscow State University
16:20-16:40	Jae-Kwang KIM Promising Green Energy Storage Systems	韩国清州大学 Cheongju University
16:40-17:00	Serguei V. SAVILOV Carbon Nanostructures in Materials Science, Energy and Environment	莫斯科国立大学 Lomonosov Moscow State University
	晚　餐 Dinner	

分论坛一：新能源材料与器件

Sub-Forum 1: New Energy Materials and Devices

（报告20分钟，20 min/report）

召集人：刘 欣 **时 间：10 月 20 日 08:30-11:50** **会场地点：万达文华酒店**
Convener: Xin LIU **Time: October 20, 08:30-11:50** **Location: Wanda Vista**

时 间 Time	报告题目 Topic	报告人 Speaker	单 位 Organization
	主持人：陈 桢 / Chair: Zhen CHEN		
08:30-08:50	计算模拟设计新型电池负极材料 Design of New Battery Anode Materials by Computational Simulation	樊晓峰 Xiaofeng FAN	吉林大学 Jilin University
08:50-09:10	等离子体技术及其储能应用 Plasma Technology for Energy Storage Applications	夏新辉 Xinhui XIA	浙江工业大学 Zhejiang University of Technology
09:10-09:30	面向类脑计算的范德华材料光电器件设计与集成 Optoelectronic Device Design and Integration Using Van der Waals Materials for Brain-Inspired Computing	孙林锋 Linfeng SUN	北京理工大学 Beijing Institute of Technology
09:30-09:50	新型铋钛双金属乙二醇化合物的储钾性能和储钾机理研究 Investigation on the Potassium-Ion Storage Performance and Mechanism of Novel Bi-Ti-Bimetal Ethylene Glycol Compound	黄镇东 Zhendong HUANG	南京邮电大学 Nanjing University of Posts and Telecommunications
09:50-10:10	茶 歇 Coffee break		
	主持人：夏新辉 / Chair: Xinhui XIA		
10:10-10:30	基于二维材料的光场调控 Optical Field Modulation based on Two-Dimensional Materials	王英英 Yingying WANG	哈尔滨工业大学 Harbin Institute of Technology
10:30-10:50	水系锌离子电池负极界面调控与性能研究 Interface Regulation and Performance of Aqueous Zinc-Ion Battery Anode	张 冬 Dong ZHANG	吉林大学 Jilin University
10:50-11:10	Perovskite-based Heterostructures: Approaches and Perspectives	Yulia LEKINA	南洋理工大学 Nanyang Technological University
11:10-11:30	水系电化学界面能量存储及转化的原子尺度模拟 Atomic Simulation of the Aqueous Interface for Electrochemical Energy Storage and Conversion	刘 欣 Xin LIU	哈尔滨理工大学 Harbin University of Science and Technology
11:30-11:50	高体积比容量钠电负极材料的物理调控 Physical Engineering of High Volumetric Capacity Anodes for Sodium Batteries	姚诗余 Shiyu YAO	吉林大学 Jilin University

分论坛二：高比能高安全电池技术

Sub-Forum 2: High-Energy and High-Safety Batteries

（报告20分钟，20 min/report）

召集人：陈 桢 **时 间：10 月 20 日 08:30-11:50** **会场地点：万达文华酒店**
Convener: Zhen CHEN **Time: October 20, 08:30-11:50** **Location: Wanda Vista**

时 间 Time	报告题目 Topic	报告人 Speaker	单 位 Organization
	主持人：赵相玉 / Chair: Xiangyu ZHAO		
08:30-08:50	锂-二氧化碳电池正极界面电催化反应研究 Electrocatalytic Reaction at the Cathode Interface of Lithium-Carbon Dioxide Batteries	何 平 Ping HE	南京大学 Nanjing University
08:50-09:10	钠基固态电解质新材料与界面 Sodium Solid Electrolytes and Interface	杜 菲 Fei DU	吉林大学 Jilin University
09:10-09:30	高能量、高安全性固态电池 High Energy, High Safety Solid-State Batteries	王治宇 Zhiyu WANG	大连理工大学 Dalian University of Technology
09:30-09:50	储能电池多层级可靠性诊断与预测技术 Multi-Scale Reliability Diagnosis and Prediction Technology for Energy Storage Batteries	王家钧 Jiajun WANG	哈尔滨工业大学 Harbin Institute of Technology
09:50-10:10	茶 歇 Coffee Break		
	主持人：杜 菲 / Chair: Fei DU		
10:10-10:30	金属硫族化合物正极材料界面调控及储镁性能研究 Interfacial Modulations and Mg-Storage Performance of Metal Chalcogenide Cathode Materials	赵相玉 Xiangyu ZHAO	南京工业大学 Nanjing Tech University
10:30-10:50	功能化水系电解液设计和储能机制研究 Rational Design of Aqueous Electrolyte and Its Storage Mechanism	姜 珩 Heng JIANG	吉林大学 Jilin University
10:50-11:10	基于双连续立方液晶的水系准固态电解质 Construction of Bicontinuous Cubic Liquid-Crystalline Aqueous Quasi-Solid Electrolyte	高新培 Xinpei GAO	海南大学 Hainan University
11:10-11:30	水系锌离子电池金属锌负极界面修饰层设计与构筑 Design and Construction of Artificial Layer to Enable Dendrite-Free Zinc Metal Anode	朱 凯 Kai ZHU	哈尔滨工程大学 Harbin Engineering University
11:30-11:50	厚电极膜精准设计与加工 High-Precision Design and Processing of Thick Electrode	田瑞源 Ruiyuan TIAN	吉林大学 Jilin University

分论坛三：电动交通动力技术

Sub-Forum 3: Power Technology in Electric Transportation

（报告20分钟，20 min/report）

召集人：张成明 **时　间：10 月 20 日 08:30-11:30** **会场地点：万达文华酒店**
Convener: Chengming ZHANG **Time: October 20, 08:30-11:30** **Location: Wanda Vista**

时　间 Time	报告题目 Topic	报告人 Speaker	单　位 Organization
	主持人：张成明 / Chair: Chengming ZHANG		
08:30-08:50	电机驱动系统在航空电气化中的应用和发展 Technology Trends for Electrical Drives for Aerospace Application	张　何 He ZHANG	宁波诺丁汉大学 University of Nottingham Ningbo China
08:50-09:10	飞机供电系统发展：从多电飞机到电推进飞机 Aircraft Power Supply System: From More Electric to All Electric Propulsion	李伟林 Weilin LI	西北工业大学 Northwestern Polytechnical University
09:10-09:30	轴向磁通电机的国内外研究进展及在通用航空中的应用 Domestic and International Research Progress and Application in General Aviation of Axial Flux Motors	张志锋 Zhifeng ZHANG	沈阳工业大学 Shenyang University of Technology
09:30-09:50	变相器基础理论研究与验证 Research and Verification of Basic Theory of Phase Transformer	陶大军 Dajun TAO	哈尔滨理工大学 Harbin University of Science and Technology
09:50-10:10	茶　歇 Coffee Break		
	主持人：陶大军 / Chair: Dajun TAO		
10:10-10:30	电动航空用超导电机技术 Superconducting Machines for Electric Aircraft	刘迎珍 Yingzhen LIU	哈尔滨工业大学 Harbin Institute of Technology
10:30-10:50	航空电作动系统无位置五相永磁同步电机的缺相容错控制技术 Open-Phase Fault-Tolerant Control for A Position Sensorless-Driven Five-Phase PMSM in the Aircraft Actuator	田　兵 Bing TIAN	南京航空航天大学 Nanjing University of Aeronautics and Astronautics
10:50-11:10	分布式驱动永磁轮毂电机研究与探索 Investigation and Exploration of Distributed Drive Permanent Magnet In-Wheel Motor	项子旋 Zixuan XIANG	江苏大学 Jiangsu University
11:10-11:30	高品质牵引永磁电机系统振动噪声关键问题探讨 Discussion on Key Issues of Vibration and Noise in High-Performance Traction Permanent Magnet Motor System	洪剑锋 Jianfeng HONG	北京交通大学 Beijing Jiaotong University

分论坛四：电动交通电源技术

Sub-Forum 4: Power Source for Electric Transportation

（报告 20 分钟，20 min/report）

召集人：吴晓刚 **时　间：10 月 20 日 08:30-11:30** **会场地点：万华文华酒店**
Convener: Xiaogang WU **Time: October 20, 08:30-11:30** **Location: Wanda Vista**

时　间 Time	报告题目 Topic	报告人 Speaker	单　位 Organization
	主持人：吴晓刚 / Chair: Xiaogang WU		
08:30-08:50	端云融合锂离子电池全生命周期管理关键技术 End-Cloud Integrates Key Technologies for Health Management of Lithium-Ion Batteries	张彩萍 Caiping ZHANG	北京交通大学 Beijing Jiaotong University
08:50-09:10	液冷型锂离子电池储能模组主动式安全阀结构设计 Structural Design of Active-Safety Valve for Liquid-Cooled Lithium-Ion Battery Energy Storage Pack	金　阳 Yang JIN	郑州大学 Zhengzhou University
09:10-09:30	电化学储能系统中部分功率变换及其关键技术研究 Partial Power Processing for Electrochemical Energy Storage Systems	张　哲 Zhe ZHANG	河北工业大学 Hebei University of Technology
09:30-09:50	电动汽车动态无线供电系统输出波动抑制方法研究 Research on Output Fluctuation Suppression Method for Dynamic Wireless Power Transfer Systems of Electric Vehicles	董　帅 Shuai DONG	哈尔滨工业大学 Harbin Institute of Technology
09:50-10:10	茶　歇 Coffee Break		
	主持人：张彩萍 / Chair: Caiping ZHANG		
10:10-10:30	无线充电技术在船舶岸电中的应用 Wireless Power Transfer Technology for Shore-to-Ship Applications	于春来 Chunlai YU	大连海事大学 Dalian Maritime University
10:30-10:50	高温固态氧化物电解池的优化集成与控制 The Optimized Integration and Control of High Temperature Solid Oxide Electrolytic Cell System	吴晓刚 Xiaogang WU	河北工业大学 Hebei University of Technology
10:50-11:10	基于电动汽车-无人机的灾后救援与恢复系统路径规划问题研究 Optimal Scheduling of EV-UAV System Providing Post-Event Relief and Recovery	班明飞 Mingfei BAN	东北林业大学 Northeast Forestry University
11:10-11:30	储能系统在舰船系统中的应用现状及未来发展 Application Status and Future Development of Energy Storage System in Ships and Warships System	孙东阳 Dongyang SUN	哈尔滨理工大学 Harbin University of Science and Technology

分论坛五：电气装备绝缘与检测技术

Sub-Forum 5: Insulation and Testing Technology for Electrical Equipments

（报告 20 分钟，20 min/report）

召集人：冯　宇　**时　间：10 月 20 日 08:30-11:30**　**会场地点：万达文化酒店**

Convener: Yu FENG　**Time: October 20, 08:30-11:30**　**Location: Wanda Vista**

时　间 Time	报告题目 Topic	报告人 Speaker	单　位 Organization
	主持人：冯　宇 / Chair: Yu FENG		
08:30-08:50	新型电力电子器件高电压绝缘封装设计与材料 High Voltage Insulation Design and Materials for Packaging of Power Electronic Devices	梅云辉 Yunhui MEI	天津工业大学 Tiangong University
08:50-09:10	基于光纤传感的绝缘缺陷声发射检测研究进展 Research Progress on Acoustic Emission Detection of Insulation Defects based on Optical Fiber Sensing	马国明 Guoming MA	华北电力大学 North China Electric Power University
09:10-09:30	基于“路”的变压器内部短路故障过程分析方法 Analyzing the Internal Fault of Transformers Using the Circuit Method	杨　鸣 Ming YANG	重庆大学 Chongqing University
09:30-09:50	基于表面生长无机功能层的聚合物介电薄膜高温储能性能研究 High-Temperature Energy Storage of Polymer Dielectric Films by Coating Inorganic Functional Layers	张天栋 Tiandong ZHANG	哈尔滨理工大学 Harbin University of Science and Technology
09:50-10:10	茶　歇 Coffee Break		
	主持人：马国明 / Chair: Guoming MA		
10:10-10:30	弓网电接触状态检测方法 Condition Detection Methods for The Electric Contact of Pantogragh-Catenary System	魏文赋 Wenfu WEI	西南交通大学 Southwest Jiaotong University
10:30-10:50	SF_6强背景中微量H_2S光声光谱检测与性能提升 Photoacoustic Spectroscopy Detection and Performance Improvement of Trace Amounts of H_2S in SF_6 Strong Background	曾福平 Fuping ZENG	武汉大学 Wuhan University
10:50-11:10	面向多电飞机应用场景下的光学传感技术研究 Optical Sensing Techniques for More-Electric Aircraft	江　军 Jun JIANG	南京航空航天大学 Nanjing University of Aeronautics and Astronautics
11:10-11:30	基于分子链运动和电荷输运协同作用环氧复合材料高温击穿机理研究 Effects of Chain Dynamic and Charge Transport on Temperature-Dependent Breakdown Mechanism of Epoxy Composites	李　枕 Zhen LI	哈尔滨理工大学 Harbin University of Science and Technology

嘉宾简介/Distinguished Guests

黄 维 Wei HUANG

报告题目 / Title

厚植关键根部技术，打造柔性电子强国

Recent Advances in Flexible Optoelectronics

报告人简介 / Biography

黄维，汉族，中国科学院院士、俄罗斯科学院外籍院士、美国国家工程院外籍院士。西北工业大学学术委员会主任、校务委员会副主任。有机电子、塑料电子、生物电子、印刷电子、能源电子、智能电子、健康电子和柔性电子学家，有机电子与信息显示国家重点实验室主任，柔性电子国家重点实验室培育建设点主任，国家柔性电子基础（前沿）科学中心首席科学家。亚太地区工程组织联合会（FEIAP）主席、世界工程组织联合会执行委员兼主席高级顾问。获得两项国家自然科学奖二等奖、四项教育部高等学校科学研究优秀成果奖（科学技术）自然科学奖一等奖、一项何梁何利“科技进步奖”、六项江苏省科学技术奖及两项中国电子学会自然科学奖一等奖，成果两次入围“中国高等学校十大科技进展”和中国半导体十大研究进展等。

黄维院士是国际上最早一批从事柔性电子、特别是有机电子、塑料电子和生物电子研究并长期活跃在柔性电子学领域的世界顶尖学者。是中国有机电子、塑料电子和柔性电子等学科的奠基人与开拓者，被业界誉为“柔性电子学之父”。在柔性电子学领域，以主要作者身份在世界顶尖期刊 Nature、Science 等顶级学术期刊发表研究论文 900 余篇，h 因子为 180，国际同行引用逾 14 万次，是科瑞唯安（全球顶尖科技论文数据库）物理、化学与材料学科全球高被引学者，获授权与公开美国、新加坡和中国等国发明专利 800 余项。

Professor HUANG Wei is Academician of the Chinese Academy of Sciences (CAS), and International Member of the National Academy of Engineering of USA (NAE), Russian Academy of Sciences (RAS), ASEAN Academy of Engineering and Technology (AAET), Asian Pacific Academy of Materials (APAM), Pakistan Academy of Sciences (PAS), International Eurasian Academy of Sciences (IEAS). He is an eminent scientist in the area of organic optoelectronics and flexible electronics. In the area of organic optoelectronics and flexible electronics, he has made a large amount of systematic and innovative achievements and has published more than 900 papers as the first author or corresponding author in Nature, Nature Materials, Nature Photonics, Nature Nanotechnology, Nature Electronics, Nature Energy, Nature Communications, Science, Science Advances, npj Flexible Electronics, Research, Advanced Materials, Journal of the American Chemical Society, etc., with over 140,000 citations (ISI Web of Knowledge) and an H-index of 180. He is also the most cited Researchers in the field of physics, material science, and chemistry. His contributions to these disciplines have led to wide-ranging publications that address both fundamental and more applied topics, and that place him amongst the 1‰ most highly cited materials/chemistry/informatics scientists/physicist in the world (ISI Highly Cited Scientist). He is Editors-in-Chief of npj Flexible Electronics and Research. He has held over 800 patents which are granted and publicized in USA, Singapore, and China. Additionally, Professor Huang has published several academic books, such as Organic Optoelectronics, Bio-optoelectronics, Introduction to Organic Light-Emitting Materials and Devices, etc.

蔡 蔚 William CAI

报告题目 / Title

电动化车辆的先进电机系统和电驱动总成

Advanced e-Machine Systems and e-Powertrains for Vehicle Electrification

报告人简介 / Biography

蔡蔚是哈尔滨理工大学头雁教授/精进电动（股票代码 688280）创始人。俄罗斯工程院外籍院士、美国 SAE 会士、中国汽车工程学会会士、中国电工技术学会会士、电动车百人会理事、中国电源学会理事。他是黑龙江省“新能源电机系统及关键材料创新研究”头雁团队带头人、汽车电子驱动控制与系统集成教育部工程研究中心首席科学家。

他是美国克拉克森大学博士，拥有新能源电气装备、电机系统和电驱动学研 18 年与产业 20 年的工作经历，包括曾在美国威斯康星大学、瑞士苏黎世联邦工学院、美国克拉克森大学、美国雷米国际公司等欧美产学界全职工作 14 年。他在电气工程特别是新能源电机和功率电子系统的研发、设计、制造和新材料应用等方面取得重要创新成果，包括发明了“发卡式“扁线绕组等引领全球高效驱动电机技术，并助推公司在美国纳斯达克上市。他是国家《节能与新能源汽车技术路线图 2.0》和《电动车安全指南》等电驱动系统的专家组长以及十四五国家重点研发计划新能源汽车电驱动指南专家组长，为电驱动行业学术和产业化做出了杰出贡献。

Dr. William CAI is the professor at Harbin University of Science and Technology (HUST) / Founder of Jing-Jin Electric (stock code 688280). Foreign academician of the Russian Academy of Engineering, Fellow of SAE International, Fellow of the Chinese Society of Automotive Engineering, Fellow of the Chinese Electrotechnical Society, Director of the China EV100 and Director of the Chinese Power Supply Society. He is the group leader of the "New Energy e-Motor System and Key Materials Innovation Research" team of Heilongjiang Province in HUST, and the chief scientist of the Engineering Research Center of the State Education Ministry for Automotive Electronic Drive Control and System Integration.

He got his PhD from Clarkson University in the United States, has 18 years of academic experience, 20 years of industry experience, including full-time in European and American Universities and industries, such as the University of Wisconsin-Madison in the United States, the Swiss Federal Institute of Technology-Zurich in Switzerland, Clarkson University in the United States, and Remy International Inc. for 14 years. He has achieved significant innovative achievements in electrical engineering, especially in the R&D, design, manufacturing, and application of new materials for new energy e-machines and power electronic systems, He invented the worldwide leading e-motor technology, including the invention of "high voltage hairpin" flat wire windings, and helped Remy International be listed on NASDAQ.

He is an expert leader in electric drive systems such as the 《Energy Saving- and New Energy Vehicle Technology Roadmap 2.0》 and the 《Electric Vehicle Safety Guide》as well as the leader of the expert group of e-Powertrain Program Guide of New Energy Vehicle for the 14th Five Year National Key R&D Plan. He has made outstanding contributions to the academic and industrial development of the electric drive industry.

申泽骧 Ze Xiang SHEN

报告题目 / Title

Graphene in Energy Storage: From Fundamental Study to Applications and Enterprise

报告人简介 / Biography

申泽骧，新加坡南洋理工大学研究生院副院博士生导师，先进光子学技术中心主任，物理学和材料科学教授。

申教授长期致力于利用超低波数拉曼光谱、光致发光光谱技术探究极端条件下石墨烯、钙钛矿及先进二维材料在极端条件下（高压、低温）的理论与应用研究。

他是南洋研究与创新奖、新加坡物理学会物理研究卓越奖金奖获奖者，俄罗斯科学院外籍院士，莫斯科国立大学荣誉教授。2019 年获新加坡杰出新移民奖。论文被引 56000 余次，H 因子 112，入选科睿唯安全球高被引学者。

Dr. SHEN is Associate Dean, Graduate College, Nanyang Technological University Singapore. He is also the Co-director, Centre for Disruptive Photonic Technologies, Professor of Physics and Professor of Materials Science.

Dr. SHEN's research involves the study of graphene, 2D materials and Perovskites using ultra-Low wavenumber Raman spectroscopy, photoluminescence and time-resolved spectroscopy in combination with high pressure and low temperature. He also works on graphene-based composites for energy storage.

He is winner of NTU Nanyang Award for Research and Innovation, Gold Medal for Research Excellence by Institute of Physics Singapore, Foreign Member of Russian Academy of Sciences, Honorary Professor of Moscow State University. He was awarded Outstanding Immigrant Award in 2019. He is a Global Highly Cited Researcher by Clarivate Analytics, with more than 56,000 citations and H index 112.

Aleksei N. KUZNETSOV

报告题目 / Title

Design of New Solid Compounds and Materials based on Ordered Metallic Fragments

报告人简介 / Biography

Aleksei N. KUZNETSOV 教授，俄罗斯科学院院士，莫斯科国立大学教授，是富金属化合物、金属间化合物、金属簇和相关各向异性材料的化学专家。Aleksei 教授的研究兴趣主要包括复杂金属系统的设计、合成、晶体学和高级理论模拟。已发表学术论文 150 余篇。主要学术成就包括：一种在非水介质中合成主族金属簇的创新方法；首创了铋和锑团簇的第一性原理电子结构计算，证明了空间芳构性；揭示了第 15 族金属阳离子团簇的结构与 Mingos-Wade 理论之间的联系。

Prof. Aleksei N. Kuznetsov is an expert in chemistry of metal-rich compounds, intermetallics, metal clusters, and related anisotropic materials. His scientific interests include design, synthesis, crystallography, and advanced theoretical simulations of complex metallic systems. Prof. Kuznetsov works at the Department of Chemistry, Lomonosov Moscow State University. He is a member of Russian Academy of Sciences. He has published more than 150 high-level papers. Prof. Kuznetsov develop an innovative method to synthesize main group metal clusters in non-aqueous media; pioneered first-principles electronic structure calculations of bismuth and antimony clusters, proving spatial aromaticity; And revealing the structure of Group 15 metal cation clusters Connection to Mingos-Wade theory.

肖成伟 Chengwei XIAO

报告题目 / Title

动力电池技术发展现状及趋势

Current Status & Trends in Automotive battery in China

报告人简介 / Biography

博士/研高，中国电子科技集团公司第十八研究所研究员，国家十三五和十四五新能源汽车重点研发专项总体专家组成员，中国制造 2025 动力电池技术路线图专题组共同组长，中国电动汽车产业技术创新战略联盟副秘书长，全国汽车标准化委员会电动汽车分委会副主任委员，全国碱性蓄电池标准化技术委员会委员等。现从事动力及储能电池、新体系电池、关键材料、测试评价及标准体系等研究工作。

Dr. Chengwei XIAO have been working in No. 18th Institute of CETC, China, Engage in R&D in the field of key materials, new chemistry battery, power & storage battery, standardization and evaluation, etc. As member of expert panel (responsible expert for power battery) for 13th & 14th five-year National Key R&D Program of New Energy Vehicles, major participant for Chinese national and sectoral standardization of power battery, etc.

吴广宁 Guangning WU

报告题目 / Title

高速列车大功率弓网受流的关键技术及展望

Key Technology and Prospect of High-power Current Receiving of Pantograph-Catenary System in High Speed Train

报告人简介 / Biography

吴广宁，西南交通大学教授、博士生导师，未来技术研究院院长，IEEE Fellow，IET Fellow，CIGRE B3 国家代表，长江学者特聘教授，国家杰出青年基金获得者，国家重点领域创新团队负责人。长期从事轨道交通先进电工材料、牵引供电设备状态检测、牵引供电系统过电压与防护的研究工作。主持获国家科技进步二等奖 1 项、省部级一等奖 3 项。

Dr. Guangning WU is a professor and doctoral supervisor at Southwest Jiaotong University, dean of Institute of Future Technology, IEEE Fellow, IET Fellow, CIGRE B3 National representative, Changjiang Scholar Distinguished Professor, winner of National Outstanding Youth Fund, leader of National Innovation Team in key fields. He has been engaged in the research of advanced electrical materials for rail transit, status detection of traction power supply equipment, overvoltage and protection of traction power supply system for a long time. He has won 1 second prize of National Science and Technology Progress and 3 first prizes of provincial and ministerial Science and Technology Progress.

刘 雷 Lei LIU

报告题目 / Title

单原子尺度精准的智能制造技术：半导体点缺陷的单体表征与控制

Intelligent Manufacturing Technology at Single Atomic Scale: Monomer Characterization and Control of Semiconductor Point Defects

报告人简介 / Biography

刘雷，发光学及应用国家重点实验室副主任，中国科学院长春光学精密机械与物理研究所研究员；中国物理学会发光分会副主任，中国物理学会半导体物理专业委员会委员，吉林省物理学会副理事长。2010 年，入选中国科学院高层次海外人才计划，并于 2016 年终期评估获优秀；2011 年，被评为 2011 年吉林省百名高层次创新创业引进人才；2015年，获得国家杰出青年基金资助；2015年，入选吉林省第五批拔尖创新人才第一层次；2016 年，获聘中国科学院特聘研究员。主要从事半导体材料的能带结构调控以及缺陷和杂质的表征与控制研究；发表《Science》、《Chemical Reviews》、《Physical Review Letters》等高水准学术论文 100 余篇，共被 SCI 他引 13000 余次。

Dr. Lei LIU is the deputy director of the State Key Laboratory of Luminescence and Applications, the recipient of the National Science Fund for Distinguished Young Scholars of China; researcher of Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences; Deputy Director of the Luminescence Branch of the Chinese Physical Society, Member of the Semiconductor Physics Professional Committee of the Chinese Physical Society, and Vice Chairman of the Jilin Provincial Physical Society. He has published over 100 high-level academic papers, including Science, Chemical Reviews, Physical Review Letters, etc, and cited over 13000 times.

于 霆 Ting YU

报告题目 / Title

二维材料的原位表征及光电应用

Two-Dimensional Materials: In-Situ Characterization and Potential Optoelectronic Application

报告人简介 / Biography

于霆，教授，博士生导师，国家级人才项目入选者，国家重点研发计划“纳米前沿”重点专项首席科学家，吉林大学学士（物理基地班），新加国立大学理学博士。2005 年 9 月至 2020 年 12 月在新加坡南洋理工大学历任讲师、助理教授、南洋助理教授、南洋副教授 (终身职位)、教授。2020 年 12 月至今在武汉大学物理科学与技术学院任教授。长期从事二维材料物性研究与性能调控，及其在微电子、光电子、光通讯和电化学储能等方面新型、高效器件的应用开发。尤其针对可用于新一代信息通信与存储的二维材料光学、光电特性等领域做出许多引领性工作。多次主办和协办国际会议，受邀做过 60 余次大会及邀请报告。曾获新加坡国家青年科学家奖（2009），国家研究基金会研究员奖（2010），杰出青年科学家等。发表学术论文 300 余篇,他引 30.000 多次，H 因子 100。多次入选爱思唯尔“高被引学者”。

Dr. Ting YU, professor of the School of Physics and Technology of Wuhan University, chief scientist of the key special project of the National Key R&D Program “Nano Frontier”. He received a PhD degree from the National University of Singapore (NUS) in 2003, and got tenured position at Nanyang Technological University in 2017. His research interests cover fabrication of low dimensional materials, especially 2D materials and investigation of their optical, optoelectrical and electrochemical properties for developing novel electronics, optoelectronics and energy conversion/storage. Dr. YU has published more than 300 papers and received over 30,000 nonself-citations. His H-index is 100.

霍峰蔚 Fengwei HUO

报告题目 / Title

Design and Application of Leather Electronics

报告人简介 / Biography

Dr. Fengwei HUO has been a professor at Nanjing Tech University since 2014. His research interests focus on the development of flexible electronic materials, devices and systems, as well as nanofunctional materials, etc. Prior to joining NanjingTech, Prof. Fengwei HUO obtained his B.S. and M.S. degrees from Jilin University in China in 1999 and 2002, respectively. He completed his Ph.D. with Prof. Chad A. Mirkin at Northwestern University in US in 2009. Then he joined the School of Materials Science and Engineering in Nanyang Technological University (NTU) as an Assistant Professor.

蒋 凯 Kai JIANG

报告题目 / Title

先进电工材料与储能技术

Advanced Electric Materials and Energy Storage Technologies

报告人简介 / Biography

蒋凯，男，教育部长江学者，华中科技大学二级教授，博士生导师。1999 年和 2006 年先后在武汉大学获得学士和博士学位，2007 至 2012 年在美国奥本大学、麻省理工学院从事博士后研究，2012 年入职华中科技大学，同年入选国家海外高层次人才计划（青年项目），受聘湖北省特聘专家。长期从事新能源材料和新型储能技术研究，主持国家重点研发计划重大项目、基金委重点项目等，先后在 Nature，Energ. Environ. Sci.等国际权威学术期刊发表学术论文 150 余篇，申请/授权发明专利 80 余项。现为英国皇家化学会会士（FRSC），IEEE PES 中国区电动汽车技术委员会动力电池技术分委会副主席，中国化工学会储能工程专业委员会副主任，中国电工技术学会电工理论与新技术委员会副主任，电力安全与高效利用教育部工程研究中心主任。

Dr. Kai Jiang is a professor in Huazhong University of Science and Technology (HUST), the Changjiang-Scholar of Ministry of Education in China and Fellow of Royal Society of Chemistry (RSC). He received BS and PhD degrees from Wuhan University in 1999 and 2006. He did his post-doctor research in Auburn University and MIT from 2007 to 2012. He was awarded with National talent program in 2012. Prof. Jiang's research interests lie in the field of advanced materials and technologies for large-scale energy storage applications, such as low cost and long lifespan liquid metal batteries, sodium ion batteries, lithium sulfur batteries and other electrochemical energy storage technologies. He has published more than 150 peer-reviewed papers on journals of Nature, Chem. Rev. and Energ. Environ. Sci., and authored over 80 patents. He was the PI for several national key projects of Ministry of Science and Technology (MOST) and Natural Science Foundation of China (NSFC). He has been the head of several departments and research institutes in HUST.

倪振华 Zhenhua NI

报告题目 / Title

二维材料界面调控与光电器件

Interface Regulation of 2D Materials and Optoelectronic Devices

报告人简介 / Biography

东南大学教授，物理学院院长，国家杰出青年基金获得者。主要研究方向为二维光电材料与器件，起草国家标准 4 项，发表 SCI 论文 200 余篇，他引 20000 余次，入选科睿唯安“高被引学者”。中国物理学会光散射专业委员会委员，国际标准化组织-国际电工委员会专家，全国纳米技术标准化技术委员会委员，低维纳米结构与性能工作组副主任。

Dr. Zhenhua NI is a Professor at Southeast University, the dean of the School of Physics, and the recipient of the National Science Fund for Distinguished Young Scholars of China. His main research direction is 2D optoelectronic materials and devices. He has drafted 4 national standards, published over 200 papers, cited over 20000 times, and was selected as a "highly cited scholar" by Clarivate. He is also a member of the Committee on Light Scattering (Chinese Physical Society), an expert of the International Organization for Standardization - International Electrotechnical Commission, a member of the National Nanotechnology of Standardization Administration of China, and deputy director of the Low Dimensional Nanostructure and Performance Working Group.

陈立宝 Libao CHEN

报告题目 / Title

三维结构锂硼复合负极的研究

3D LiB Composite Anode

报告人简介 / Biography

中南大学“升华学者”特聘教授，湖南省“杰出青年”基金获得者，英国皇家化学学会会士（FRSC）。主要研究方向为高性能电极材料及电池器件。在Advanced Materials, Nature Communications, Materials Today等国际权威期刊上发表高水平学术论文60余篇，论文SCI总他引次数6000余次。研制的宽温范围锂离子电池和三维锂负极已成功产业化。

Libao CHEN is now a professor in Central South University. He is the Fellow of The Royal Society of Chemistry. His main research interest is focused on the high-performance energy storage materials and devises, including Li composite anode and wide-temperature lithium ion batteries. He has published more than 60 papers in Advanced Materials, Nature Communications, Materials Today, and the papers are cited more than 6000 times.

王 凯 Kai WANG

报告题目 / Title

纳米碳在材料科学、能源及环境领域研究

Carbon Nanostructures in Materials Science, Energy and Environment

报告人简介 / Biography

中国科学院电工研究所研究员、博导，国家优青，北京市杰青。担任中国电工技术学会青工委副主任委员，中国电工技术学会储能专委会副主任委员、中国超电产业联盟首届青年理事等学术职务，同时也任电源学报、The Innovation, Green Energy and Environment, Battery Energy、Rare Metals、电气工程、材料工程等学术期刊的编委/青年编委。主要从事功率型储能器件的基础科学与工程化技术研究，获2020年北京市自然科学奖。

Dr. Kai WANG is PHD supervisor at the Institute of Electrical Engineering, Chinese Academy of Sciences. He is the Winner of National Science Foundation For Excellent Youth Scholars and Beijing Municipal Natural Science Foundation for Distinguished Young Scholars. Dr. WANG Hold the vice chairman of Youth Work Committee and Energy Storage Special Committee of China Electrotechnical Society and the first Youth Council member of China Super Electric Industry Alliance,among other academic positions. He Serve as Editorial Board Member/Young Editorial Board Member for academic journals such as Journal of Power Supply, The Innovation, Green Energy and Environment, Battery Energy, Rare Metals, Electrical Engineering, Journal of Materials Engineering, etc. He mainly engaged in fundamental scientific research and engineering technology development of power-type energy storage devices, awarded the 2020 Beijing Natural Science Award.

夏 晖 Hui XIA

报告题目 / Title

锰基正极材料结构调控用于电化学储能

Manganese-Based Cathode Materials for Electrochemical Energy Storage

报告人简介 / Biography

南京理工大学，材料科学与工程学院教授、博士生导师，中国硅酸盐学会固态离子学分会理事、江苏省杰出青年科学基金获得者、江苏省“333 高层次人才”第二层次培养对象、国际先进材料学会（IAAM）会士。先后于 2000 年和 2003 年在北京科技大学获得学士和硕士学位，2007 年于新加坡国立大学获得博士学位。博士毕业后在新加坡国立大学机械工程系从事博士后研究工作至 2011 年。于 2011 年初被引进到南京理工大学材料科学与工程学院，为格莱特纳米科技研究所纳米能源材料(NEM)课题组负责人(http://nem.smse-njust.com/)。课题组主要从事锂/钠离子电池，全固态薄膜锂电池，超级电容器以及新型储能体系关键材料与器件的研究。在 Nat. Sustain.、Nat. Commun.、Adv Mater.等期刊发表论文 190 余篇，论文引用 16000 余次，H-index 为 71。

Dr. Hui Xia is a full professor at Nanjing University of Science and Technology. He received his B.E. and M.E. from University of Science and Technology Beijing in 2000 and 2003, and Ph.D. from National University of Singapore in 2007. From 2007 to 2011, he was a research fellow at National University of Singapore under the supervision of Prof. Lu Li. Prof. Xia joined Nanjing University of Science and Technology in 2011 and is currently the group leader of Nano Energy Materials (NEM, http://nem.smse-njust.com). His research interests include all-solid-state microbatteries, supercapacitors, and new energy storage systems. He has published 3 patents and over 190 papers in peer-reviewed international journals, including Nat. Sustain., Nat. Commun., Adv. Mater. and so on.

Jae-Kwang KIM

报告题目 / Title

Promising Green Energy Storage Systems

报告人简介 / Biography

Dr. Jae-Kwang KIM received his Ph.D. degree from Chalmers University of Technology (Sweden, under the supervision of Prof. Per Jacobsson) in 2013. After assistant professor (Focused research) at the Ulsan National Institute of Science and Technology (UNIST), he joined the faculty of the Energy Convergence Engineering Department at Cheongju University in 2015. He is head of department and leads the Research Institute of Photovoltaics. His research interests focus on understanding electrochemical performance that are essential to energy integrated system, conversion, and storage, and developing advanced energy storage materials, hybrid solid electrolyte, and next-generation rechargeable batteries. He received the Minister of Education Award in 2017.

Serguei V. SAVILOV

报告题目 / Title

Carbon Nanostructures in Materials Science, Energy and Environment

报告人简介 / Biography

Dr. Serguei SAVILOW was born in 1978, Soviet Union. In 2000 he graduated from Chemistry Department of M.V. Lomonosov Moscow State University, where got Ph.D. in 2004. From 2000 - junior researcher, 2003 – scientific researcher, 2005 - senior research, 2013 – leading researcher, from 2020 - Head of Catalysis and Gas Electrochemistry Laboratory. He is also leading researcher in A.V. Topchiev Institute of Petrochemical Synthesis and N.S. Kournakov Institute of General and Inorganic Chemistry of the Russian Academy of Sciences. At 2018 he got the Dr. habil degree in Physical Chemistry.

何 平
Ping HE

何平教授于2009年在复旦大学获得物理化学博士学位，随后在日本筑波国立产业技术综合研究所（AIST）从事博士后研究。他于2011年11月加入南京大学，现为现代工程与应用科学学院能源科学与工程系教授。何平教授的研究方向主要集中在能源存储和转换材料、能源化学和先进电池技术，包括锂离子电池、锂硫电池和锂-空气电池等。

Dr. Ping HE obtained his Ph. D. in Physical Chemistry from Fudan University in 2009, and later worked as a postdoctoral fellow at National Institute of Advanced Industrial Science and Technology (AIST) in Tsukuba, Japan. He joined the faculty of Nanjing University in Nov. 2011, where he is currently a Full Professor in the Department of Energy Science and Engineering, College of Engineering and Applied Sciences. Prof. Ping He's research interests focus on Energy storage and conversion materials, Energy chemistry and technology for advanced batteries including Li-ion battery, Li-Sulfur battery and Li-air battery.

报告题目 / Title

锂-二氧化碳电池正极界面电催化反应研究

Electrocatalytic Reaction at the Cathode Interface of Lithium-Carbon Dioxide Batteries

王治宇
Zhiyu WANG

王治宇，大连理工大学教授。英国皇家化学会会士、洪堡学者、国家自然科学优秀青年基金获得者。研究聚焦面向“三高“(高安全性、高能量、高耐候性)固态电池技术与“三低”(低能耗、低排放、低成本)海水电解制氢技术的能源化学工程。在Nat. Commun.等期刊发表论文100余篇，他引15000余次，H指数57，入选科睿唯安全球高被引科学家。获2019年辽宁省自然科学一等奖、2020年侯德榜化工青年科技奖等多个奖项。担任国际电化学能源科学院理事、中国颗粒学会青年理事，学术期刊J. Energy Chem.编委、InfoMat、Chinese Chem. Lett.等期刊青年编委。

Dr. Zhiyu WANG is a professor at Dalian University of Technology. Member of the Royal Society of Chemistry, Humboldt Scholar, National young talent. His research focuses on energy chemistry engineering for high safety, high energy, and high weather resistance solid-state battery technology and low energy consumption, low emissions, and low cost seawater electrolysis. He has published over 100 papers, cited over 15000 times, H-index 57, and was selected as a "highly cited scholar" by Clarivate.

报告题目 / Title

高能量、高安全性固态电池

High Energy, High Safety Solid-State Batteries

王家钧
Jiajun WANG

王家钧，哈工大长聘教授、博导，国家级青年人才，英国皇家化学会会士，“中国电化学青年奖”获得者。曾工作于美国能源部-布鲁克海文国家实验室和阿贡国家实验室，任职研究员科学家（永久位置）。迄今已在Science，Nature子刊等行业顶级期刊发表论文100余篇，申请发明专利30余项，多项成果被华为、一汽集团等企业投入使用并取得良好效益。承担工信部大科学工程项目、基金委重点基金国家部委科研项目等多项课题。长期从事固态电池、无损检测及电池安全失效分析研究，发展了基于同步辐射成像的多模态表征技术，原位、无损、三维可视化的解析高可靠电池的多种失效模式（物理机械失效、化学组成与相转变、离子传输动力学），阐明其与电池性能之间的构效关系。

Dr. Jiajun WANG is a professor (tenured) of Harbin Institute of Technology, a member of the Royal Society of Chemistry in the UK, and a recipient of the "China Electrochemical Youth Award". He has developed multi-scale characterization techniques based on synchronous radiation, which can analyze failure mechanism of various batteries with in situ, non-destructive, and three-dimensional visualization. So far, prof. Wang have published more than 100 papers in top journals such as Science and Nature.

报告题目 / Title

储能电池多层级可靠性诊断与预测技术

Multi-Scale Reliability Diagnosis and Prediction Technology for Energy Storage Batteries

赵相玉
Xiangyu ZHAO

赵相玉，南京工业大学材料学院研究员，博士生导师。近年来聚焦电化学储能材料及二次电池新体系，在阴离子储运和阴离子配位调控等研究方面取得创新成果，提出的“氯离子电池”入选我国及欧洲面向2030年的储能技术发展计划。获江苏省高等学校科学技术研究成果奖、德国KIT的Guest Scientist Fellowship；以第一或通讯作者在Adv. Mater.、Angew. Chem. Int. Ed.等SCI期刊发表论文70余篇；获授权中国发明专利8件、欧洲专利1件；负责5项国家自然科学基金项目（优青、中德合作交流、面上等）、4项省部级科研项目和多项委托课题。

Dr. Xiangyu ZHAO is a professor of Materials Science and Engineering at Nanjing Tech University. He received his PhD in Materials Science from Nanjing University of Technology in 2010, and then joined the same university. In 2012–2013 he worked as a guest scientist (Helmholtz Research Fellowship) at the Institute of Nanotechnology, Karlsruhe Institute of Technology. His research focuses on electrode/electrolyte materials and cell designs for batteries, such as chloride-ion batteries and magnesium batteries.

报告题目 / Title

金属硫族化合物正极材料界面调控及储镁性能研究

Interfacial Modulations and Mg-Storage Performance of Metal Chalcogenide Cathode Materials

杜 菲
Fei DU

杜菲，吉林大学唐敖庆卓越教授，博士生导师，新型电池物理与技术教育部重点实验室主任，吉林大学物理学院副院长，吉林省检测技术协会理事长，中国化工学会储能工程专业委会委员，InfoMat杂志青年编委。近年来，杜菲教授围绕着新型储能电池体系设计、关键电极材料的开发等研究领域开展了大量的研究工作，在包括Nat. Commun., Phys. Rev. Lett.等国际著名杂志发表论文200余篇，个人H因子51；以第一完成人获2021年吉林省科学技术奖自然科学一等奖。

Dr. Fei DU is a Tang Aoqing Distinguished Professor of Jilin University, Doctoral Supervisor, Director of the Key Laboratory of Physics and Technology for Advanced Batteries (Ministry of Education), Deputy Dean of the College of Physics in Jilin University, Chairman of Jilin Province Detection Technology Association, Member of Energy Storage Engineering Professional Committee of China Chemical Industry Society, Young Editorial Board of InfoMat Magazine. Recently, Prof. Du mainly foucs on the design of new energy storage batteries and electrode materials. He has published more than 200 papers in journals (including Nat. Commun.), with an H index of 51. He was awarded the First Prize of Natural Science of Jilin Provincial Science and Technology Award in 2021.

报告题目 / Title

钠基固态电解质新材料与界面

Sodium Solid Electrolytes and Interface

夏新辉
Xinhui XIA

夏新辉，浙江工业大学教授，国家级青年人才，浙江省高层次人才专家，浙江省特聘专家。主要研究方向为电化学储能关键材料的制备和储能机制研究。以第一/通讯作者在 Nat. Commun.和 Adv. Mater. 等期刊发表 SCI 论文 100 余篇；主持多项国家自然科学基金、省重点研发计划项目；担任 SCI 期刊 Journal of Electronic Materials副主编以及其他 5 个 SCI 期刊的编委，连续 5 年（2018-2022）入选科睿唯安全球高被引学者名录。

Dr. Xinhui XIA is a professor of Zhejiang University of Technology. His main research interests focus on the design and preparation of key materials for electrochemical energy storage and the study on energy storage mechanism. He published more than 100 SCI papers; He served as the associate editor of Journal of Electronic Materials.

报告题目 / Title

等离子体技术及其储能应用

Plasma Technology for Energy Storage Applications

孙林锋
Linfeng SUN

孙林锋，北京理工大学物理学院，教授，博士生导师，国家重点研发计划首席青年科学家，主要研究面向类脑计算的新型范德华材料器件物理设计与集成方面的研究工作。2016年博士毕业于南洋理工大学，师从Shen Zexiang教授。随后在新加坡科技设计大学开展博士后工作，并于2017年获韩国科技部“Korean Research Fellowship”资助，加入韩国成均馆大学CINAP研究中心。2021年入职北京理工大学，主持国家重点研发计划青年项目、国家高层次青年人才引进项目、北京市自然科学基金重点研究计划、徐特立青年学者启动计划等项目。

Dr. Linfeng SUN is a professor in School of Physics, Beijing Institute of Technology, and serving as the Chief Young Scientist of the National Key R&D Program, China. He leads many important projects, such as the National Key R&D Program and the National High-Level Youth Talent Program and his research mainly focuses on the physically optoelectronic design and integration using novel van der Waals material for brain-inspired computing. In 2016, he graduated with a Ph.D. degree from Nanyang Technological University. In 2017, he was funded by the Korean Research Fellowship from the Ministry of Science and ICT of South Korea and joined the Institute of Basic Science (CINAP) of South Korea.

报告题目 / Title

面向类脑计算的范德华材料光电器件设计与集成

Optoelectronic Device Design and Integration Using Van der Waals Materials for Brain-Inspired Computing

张 何
He ZHANG

张何，2002年获得浙江大学学士学位，2008年获得英国诺丁汉大学博士学位，现任宁波诺丁汉大学教授、IET Fellow、英国皇家航空学会会士、浙江省多电飞机技术重点实验室主任。张何教授长期深耕于航空电气化的高性能电机驱动的研究领域。先后发表学术论文160多篇，其中SCI期刊论文80篇。

Dr. He (Alan) ZHANG received his B.Eng. degree from Zhejiang University, China, in 2002. He obtained the MSc. and Ph.D. degree in electrical machines from The University of Nottingham, UK, in 2004 and 2008 respectively. After this he worked as Research Fellow at the University of Nottingham and Director of Best Motion Technology Centre. He moved to University of Nottingham Ningbo China as Senior Research Fellow in 2014 and Principal Research Fellow in 2016, and promoted to Full Professor in 2020. Currently he is the Director of Nottingham Electrification Centre (NEC) within the Power electronics, Machines and Control research group in University of Nottingham.

报告题目 / Title

电机驱动系统在航空电气化中的应用和发展

Technology Trends for Electrical Drives for Aerospace Application

李伟林
Weilin LI

李伟林，现任西北工业大学教授、博导，德国亚琛工大博士。入选国家级青年人才项目，首批中国科协青年人才托举工程。获陕西省杰出青年基金、中国航空学会青年科技奖、陕西省青年科技奖。主要从事多电飞机供电技术研究，发表SCI论文30余篇，授权发明专利15项。主持科研项目30余项，其中国家自然基金3项，工信部民机专项、空装十三五预研等国家级纵向8项多项研究成果应用于歼20、运20等飞机。以第一完成人获中国航空学会科技进步二等奖1项，陕西省高等学校科技奖2项。

Dr. Weilin LI received the B.S. and M.S. degrees in electrical engineering from Northwestern Polytechnical University, respectively. In 2013, he obtained the Ph.D (Dr.-Ing.) degree in electrical engineering from the Institute for Automation of Complex Power Systems, E.ON Energy Research Center, RWTH Aachen University, Aachen, Germany. He is now with the department of electrical engineering in Northwestern Polytechnical University as Full Professor. His research interests are protection in medium voltage DC (MVDC) power system, and power electronic applications in more electric aircraft. He has authored or coauthored for more than 50 peer reviewed journal and conference papers.

报告题目 / Title

飞机供电系统发展：从多电飞机到电推进飞机

Aircraft Power Supply System: From More Electric to All Electric Propulsion

张彩萍
Caiping ZHANG

张彩萍，北京交通大学电气工程学院教授，2010年获得北京理工大学博士学位，2008年至2009年在英国南安普顿大学访问交流。主要研究方向为电动汽车/储能锂离子电池多物理场建模与状态估计、电池老化机理与剩余寿命预测、故障诊断、电池控制与优化充电、电池耐久性管理策略。主持国家自然科学基金项目3项，国家重点研发计划项目课题3项。发表50多篇SCI论文，其中第一/通讯作者论文30余篇，合著英文专著1部。曾获国家优秀青年科学基金、北京市科技新星计划、国家科学技术奖二等奖、教育部技术发明奖一等奖。

Dr. Caiping ZHANG is a professor of School of Electrical Engineering, Beijing Jiaotong University and was a visiting PhD student at the University of Southampton from 2008 to 2009. Her research interests include Li-ion battery multi-physics modeling and states estimation in electric vehicles, battery degradation mechanism and remaining life prediction, fault diagnosis, battery control and optimal charging, battery endurance and reliability management strategy. She has published more than 50 top journal papers and awarded the National Excellent Young Scientists Fund, Beijing New-star Plan of Science and Technology, National Science and Technology Award 2nd Prize, and Ministry of Education Technology Invention Award 1st Prize.

报告题目 / Title

端云融合锂离子电池全生命周期管理关键技术

End-Cloud Integrates Key Technologies for Health Management of Lithium-Ion Batteries

金 阳
Yang JIN

金阳，现任郑州大学电气与信息工程学院教授/博士生导师，郑州大学电网储能与电池应用研究中心主任。2017年博士毕业于西安交通大学电气工程学院。研究方向为电化学储能系统安全监测和预警技术。近五年以第一/通讯作者在Nature Energy、Joule等期刊发表SCI学术论文40余篇；主持国家自然科学基金优秀青年科学基金、面上项目、青年基金、国家电网公司总部科技项目等，出版储能安全专著《锂离子电池储能电站早期安全预警及防护》一部。

Dr. Yang JIN is currently a professor/doctoral supervisor at the School of Electrical and Information Engineering, Zhengzhou University, and the director of the Grid Energy Storage and Battery Application Research Center of Zhengzhou University. His research interest includes safety monitoring and early warning technology of electrochemical energy storage systems. Recently, he has published more than 40 papers including Nat. Energy. He has presided over The National Excellent Youth Science Fund and Technology project of State Grid Corporation Headquarters, etc., and published a monograph titled "Early Safety Warning and Protection of Lithium-ion Battery Energy Storage Power Stations".

报告题目 / Title

液冷型锂离子电池储能模组主动式安全阀结构设计

Structural Design of Active-safety valve for Liquid-cooled Lithium-ion Battery Energy Storage Pack

张 哲
Zhe ZHANG

张哲，国家级高层次人才、河北省百人计划特聘专家，河北工业大学教授、博导，高效电能变换与电机驱动先进技术研究所所长，IEEE高级会员。长期从事高频、高效电力电子功率变换的研究工作，发表学术论文200余篇，多次获得IEEE期刊和国际会议优秀论文奖，现担任IEEE Transactions on Industrial Electronics（TIE)、IEEE Access副主编，中国工程院Engineering期刊青年通讯专家。

Dr. Zhe ZHANG is currently a Professor and Director of Research Institute of Power Electronics and Motor Drive at Hebei University of Technology. He has authored or coauthored more than 200 transactions and international conference papers and filed more than ten patent applications. His research interests include applications of wide bandgap devices, partial power processing, high frequency dc–dc converters, multiple-input dc–dc converters, soft switching power converters, and multilevel dc–ac inverters for renewable energy systems, hybrid electric vehicles and uninterruptable power supplies. He is an Associate Editor for the IEEE Transactions on Industrial Electronics, IEEE Access, and the Guest Editor of EEE Journal of Emerging and Selected Topics in Power Electronics, the IEEE Journal of Emerging and Selected Topics in Industrial Electronics.

报告题目 / Title

电化学储能系统中部分功率变换及其关键技术研究

Partial Power Processing for Electrochemical Energy Storage Systems

梅云辉
Yunhui MEI

梅云辉，天津工业大学电气工程学院，教授、博导、电气工程学院常务副院长。长期从事电力电子器件封装与可靠性研究，主持国家优青、天津市杰青、国家基金项目、国防预研项目、华为、蔚来等企业合作项目逾30项。担任中国电源学会理事、元器件专委会副主任、专家咨询委员会副主任、IEEE Senior Member、《电源学报》编委、天津市电源学会副理事长等。已发表学术论文140余篇，其中SCI收录论文100余篇，授权发明专利27件，曾获IEEE CPMT Young Award、中国电源学会技术发明奖一等奖、中国电工技术学会技术发明奖一等奖、天津市技术发明奖一等奖、教育部霍英东教育基金高等院校青年科技奖、IEEE ICEPT Outstanding Paper Award、国家第三代半导体产业技术创新战略联盟“特别贡献奖”等。

Dr. Yunhui MEI is a professor of Tianjin University of Technology and executive vice president of the School of Electrical Engineering. He has been engaged in power electronic device packaging and reliability research for a long time, and has presided over more than 30 cooperation projects with national outstanding youths and Tianjin outstanding youths, etc. He has published more than 140 papers and 27 authorized invention patents. He has won many important awards including the IEEE CPMT Young Award.

报告题目 / Title

新型电力电子器件高电压绝缘封装设计与材料

High Voltage Insulation Design and Materials for Packaging of Power Electronic Devices

马国明
Guoming MA

马国明，华北电力大学教授，博导，IEEE高级会员，美国普林斯顿大学访问学者。入选中国科协“青年人才托举工程”，获中国电力优秀青年工程师奖，获国家自然科学基金优秀青年科学基金、霍英东教育基金会高等院校青年教师基金资助。担任CIGRÉ D1/B3.57工作组和D1.60工作组中国代表，是IEEE P2991工作组副主席，IEEE P2426标准工作组秘书，IEEE P2426、P2828、P3148标准工作组成员。担任IEEE Transaction on Power Delivery副编辑，High Voltage副编辑，Electrical Engineering期刊高压领域主编，IEEE DEI Diagnostics Technical Committee委员，中国电工技术学会青年工作委员会副秘书长，中国电工技术学会电工测试专委会委员，中电联微型智能传感标准化技术委员会委员。主要开展电气装备先进传感检测与状态智能诊断研究，发表SCI论文70余篇，授权国家发明专利30余项，研究成果获得省部级一等奖4项。

Dr Guoming MA is from North China Electric Power University, Senior Member of IEEE, and visiting Scholar of Princeton University. He was selected for the "Young Talent Support Project" of the China Association for Science and Technology. Dr MA mainly focus on advanced sensing detection and state intelligent diagnosis of electrical equipment, and has published more than 70 papers.

报告题目 / Title

基于光纤传感的绝缘缺陷声发射检测研究进展

Research Progress on Acoustic Emission Detection of Insulation Defects Based on Optical Fiber Sensing

杨 鸣
Ming YANG

杨鸣，博士（后），重庆大学教授，博士生导师，IEEE 高级会员。研究方向为交直流电网电磁暂态特性分析与防护。主持国家自然科学基金项目3项(优秀结题1项)，国家重点研发计划子课题2项(其中1项为全国首批“揭榜挂帅”项目)，省部级项目4项；参与国家自然科学基金重点项目2项(排名2)，973课题1项，国家自然科学基金面上项目2项。近5年，以第一/通讯作者身份发表一区或IEEE汇刊论文20篇，以第二完成人出版专著1部，授权发明专利10余项，参编IEEE国际标准2项。担任输配电领域顶级期刊IEEE Trans. Power Delivery编辑，IEEE PP2833工作组秘书，CIGRE C4.45、IEEE P2426工作组成员、电工技术学会第九届理事会青年工作委员会委员、中国电力科学研究院有限公司期刊中心青年专家团团员。

Dr. Ming YANG is a professor at Chongqing University and senior member of IEEE. His research direction is analysis and protection of electromagnetic transient characteristics of AC and DC power grids. He hosted many projects supported by the National Natural Science Foundation of China. Recently, he has published 20 papers, 1 monograph, and more than 10 invention patents, and participated in the compilation of 2 IEEE international standards.

报告题目 / Title

基于“路”的变压器内部短路故障过程分析方法

Analyzing the Internal Fault of Transformers Using the Circuit Method

魏文赋
Wenfu WEI

魏文赋，毕业于西安交通大学，在电力系统、轨道交通领域开展电接触、放电等离子体、先进电工材料等方向的应用基础研究。获国家自然科学基金优秀青年基金，入选中国电工技术学会等离子体专委会优秀青年学者、获第七届“全国铁路青年科技创新奖”。担任IEEE P2753国际标准工作组主席、多个国内外学术组织委员、学术期刊编委。编制国际/国家标准5项，获得标准制定贡献奖。出版中、英文学术专著3部。发表学术论文100余篇(含SCI收录70余篇)，入选ESI热点论文与高被引论文，JAAS封面论文等，授权国家发明专利30余项。

Dr. Wenfu WEI are focused on the electrical discharge and advanced functional materials. He has won the first prize of the Science Progress Award of the Ministry of Education, etc, and National Railway Youth Innovation Award. Dr. Wei is the chair of IEEE P2753 work group. He also is the co-chair of IEEE ICCS 2021 organization committee (win the ICCS “Outstanding Leadership award”), and the guest editor of IEEE Transactions on Plasma Science. He undertook more than 10 scientific research projects such as the National Natural Science Foundation of China ". He has published 3 academic monographs, more than 100 peer reviewed papers, and granted more than 30 national patents.

报告题目 / Title

弓网电接触状态检测方法

Condition Detection Methods For The Electric Contact of Pantogragh-Catenary System

刘迎珍
Yingzhen LIU

刘迎珍，国家级青年人才、哈尔滨工业大学教授。长期从事高功率密度电机的研究工作，包括超导电机和永磁电机，博士毕业于德国顶尖精英大学卡尔斯鲁厄理工学院。发表SCI论文30余篇，主持并参与德国亥姆霍兹联合会、中国航天科技集团、德国科学基金会、欧盟Horizon2020、德国联邦经济事务和能源部等科研项目，任《Superconductor Science and Technology》客座编辑、《Superconductivity》青年编委。

Dr. Yingzhen LIU, the National level young talents, professor at Harbin Institute of Technology. Long-term work on the High-Power density motors, both superconducting motor and permanent magnet motor, PhD from the Karlsruhe Institute of Technology, one of Germany's top elite universities. More than 30 SCI papers published, chaired and participated in scientific research projects of the Helmholtz Association of German Research Centres, China Aerospace Science and Technology Corporation, German Science Foundation, European Union Horizon 2020, Federal Ministry for Economic Affairs and Energy, served as Guest Editor of Superconductor Science and Technology and Youth Editorial Board Member of Superconductivity

报告题目 / Title

电动航空用超导电机技术

Superconducting Machines for Electric Aircraft

陶大军
Dajun TAO

陶大军，哈尔滨理工大学电气与电子工程学院教授、博士生导师，省青年教学名师，教育部汽车电子驱动控制与系统集成工程研究中心主任。长期从事大电机与特种电机理论、设计与应用分析技术研究，近年主持参加国家自然科学基金、国家重点研发计划子课题、国防基础研究计划项目、创新人才项目、企业委托项目等20余项。担任中国电工技术学会电气工程教育专业委员会副理事长，中国电机工程学会电工理论与新技术专业委会委员，中国工程教育专业认证专家等。获省教学成果特等奖、一等奖、二等奖各1项。

Dr. Dajun TAO is a professor of Harbin University of Science and Technology, the provincial youth teaching famous teacher, and the Ministry of Education Automotive Electronic Drive Control and System Integration Engineering Research Center Director. He has been engaged in the theory, design and application analysis technology research of large machine and special motor for a long time. In recent years, he has presided over and participated in more than 20 projects such as the National Natural Science Foundation, national key research and development program sub-projects. He served as the vice chairman of the Electrical Engineering Education Committee of China Electrotechnical Society, a member of the Electrical Theory and New Technology Committee of China Electrical Engineering Society, and a certified expert of CEEAA. He has won the provincial teaching achievement special prize, first prize, second prize each.

报告题目 / Title

变相器基础理论研究与验证

Research and Verification of Basic Theory of Phase Transformer

曾福平
Fuping ZENG

曾福平，博士，武汉大学高电压与绝缘技术研究所所长。湖北省杰出青年基金获得者。兼任国际大电网会议组织CIGRE WG B3.57和JWG A3/B3.59委员、中国电工技术学会高压测试专委会委员、《High Voltage》期刊Associate Editor。主要从事输配电装备绝缘状态在线监测与故障诊断方面的研究工作，主持国家自然科学基金3项，由科学出版社出版中文学术专著3部、英文学术专著3部，发表高水平学术论文120余篇，其中SCI检索论文70余篇、EI检索论文40余篇，获授权发明专利20余件。研究成果获省部级科技进步一等奖3项。

Dr. Fuping ZENG is the Director of the Institute of High Voltage and Insulation Technology of Wuhan University. He is the member of CIGRE (International Council on Large Electric Systems) WG B3.57 and JWG A3/B3.59, High Voltage Testing Committee of the China Electrotechnical Society, and associate editor of the journal《High Voltage》, and received Hubei Outstanding Youth Fund and three first prizes for Science and Technology Progress Award. Dr ZENG mainly engaged in the transmission and distribution of equipment insulation condition online monitoring and fault diagnosis, around the key scientific issues. Presided over three National Natural Science Foundation of China.

报告题目 / Title

SF_6强背景中微量H_2S光声光谱检测与性能提升

Photoacoustic Spectroscopy Detection and Performance Improvement of Trace amounts of H_2S in SF_6 Strong Background

樊晓峰
Xiaofeng FAN

樊晓峰，吉林大学材料科学与工程学院教授、博士生导师。瑞典高级材料国际联合会会士，爱思唯尔2020中国高被引学者。2009年获得新加坡南洋理工大学理学博士学位。2009年6月至2011年5月在新加坡南洋理工大学物理与数学学院做博士后研究工作。自2011年6月起至今，在吉林大学材料科学与工程学院工作。主要研究领域为凝聚态物理与材料物理，负责和参加多项国家自然基金项目，获得吉林省自然科学一等奖二项。目前主要研究方向：低维度新材料的设计及在光电、能源方面的应用研究；材料表面与电极材料的计算模拟研究等。发表国际核心学术期刊论文140余篇，包括Light，ACS Nano，JACS等高水平文章，被引用8000余次，其中10篇论文引用超过百次。

Dr. Xiaofeng FAN is from School of Materials Science and Engineering, Jilin University (JLU). He is a member of the International Association of Advanced Materials, Sweden and a Highly Cited Scholar of Elsevier 2020 China. He received his Ph. D from Nanyang Technological University (NTU) in Singapore in 2009. From 2009 to 2011, he was a postdoctoral researcher in NTU. Since June 2011, I have been working in JLU. His main research field is condensed matter physics and material physics.

报告题目 / Title

计算模拟设计新型电池负极材料

Design of New Battery Anode Materials by Computational Simulation

黄镇东
Zhendong HUANG

黄镇东，2012年博士毕业于香港科技大学，随后于日本京都大学从事博士后研究工作至2014年回国加入到南京邮电大学材料科学与工程学院省部共建有机电子与信息显示国家重点实验室工作，现为材料学院教授、博导，新能源材料与器件系主任，长期致力于新型储能材料的设计、合成、性能调控及柔性储能器件研究。先后主持国自然面上、青年等项目共5项。在Nat. Commun.等期刊发表论文60余篇，授权发明专利10件。担任南京机械工程学会理化与无损检测专委会副主任委员、eScience和Energy Reviews期刊青年编委。

Dr. Zhendong HUANG is a professor and doctoral supervisor at the School of Materials Science and Engineering, Nanjing University of Posts and Telecommunications. He has long been committed to the design, synthesis, performance regulation, and research on flexible energy storage devices of new energy storage materials. He has published over 60 SCI papers in journals such as Nat. Commun. and Adv. Functi. Mater., and granted 10 patents. He served as the Vice Chairman of the Physical, Chemical, and Non-destructive Testing Special Committee of the Nanjing Mechanical Engineering Society.

报告题目 / Title

新型铋钛双金属乙二醇化合物的储钾性能和储钾机理研究

Investigation on the Potassium-Ion Storage Performance and Mechanism of Novel Bi-Ti-Bimetal Ethylene Glycol (Bi-Ti-EG) Compound

王英英
Yingying WANG

王英英，哈尔滨工业大学（威海）光电科学系教师，研究方向为利用拉曼光谱探测石墨烯的能带结构、应力、应变、电声子耦合、掺杂及利用光谱学手段探测石墨烯的吸收及光导等。以第一/通讯作者发表论文21篇，被引3000余次，H因子19。基于二维材料多层膜系统光场调控工作，2019年-2020年获得北京市科学技术进步奖二等奖1项、仪器仪表学会科学技术进步奖一等奖1项，分析测试协会科学技术奖一等奖1项及产学研合作促进会产学研合作创新成果二等奖1项。

Dr. Yingying WANG is a faculty in the Department of Optoelectronics, Harbin Institute of Technology (Weihai). The research interest includes the detection of band structure, stress, strain, electro-phonon coupling, doping, absorption and photoconductivity of graphene by Raman spectroscopy. Currently, she has published 21 papers as the first author or corresponding author and received many awards including Second Prize of the Beijing Science and Technology Progress, and First Prize of the Science and Technology Progress Award of China Instrument and Control Society.

报告题目 / Title

基于二维材料的光场调控

Optical Field Modulation based on Two-Dimensional Materials

高新培
Xinpei GAO

高新培，海南大学化学化工学院教授，博士生导师，“能源胶体与界面”创新培育团队负责人，入选工信部高层次人才计划青年项目。2017年于山东大学胶体与界面化学教育部重点实验室获博士学位。2017-2020年于德国卡尔斯鲁厄理工学院从事博士后研究。专注于能源存储与转化过程中的胶体与界面化学现象与问题研究，以第一/通讯作者身份在Energy Environ. Sci.等期刊发表研究论文30篇，H-index 26。主持国家自然科学基金2项，省部级5项。

Dr. Xinpei GAO is Professor at Hainan University, School of Chemistry and Chemical Engineering. He received his PhD in physical chemistry from Shandong University in 2017, and began his postdoctoral research at Helmholtz Institute Ulm from 2017 to 2020. His research focuses on colloid and interface chemistry in energy storage and conversion process., and sodium-sulfur batteries.

报告题目 / Title

基于双连续立方液晶的水系准固态电解质

Construction of Bicontinuous Cubic Liquid-Crystalline Aqueous Quasi-Solid Electrolyte

姜 珩
Heng JIANG

姜珩，吉林大学物理学院教授，博士生导师。主要从事二次电池新体系、功能化电解液和关键电极材料的设计开发及储能机制的研究。主要包括：新型非金属载流子（阴/阳离子）水系二次电池储能机制研究；水系锌金属电池电解液开发及商业化应用；高镍正极材料功能化设计及商业化软包电池组装；新型锂硫二次电池正极及电解液的设计和性能优化。发表包括Nat. Sustain., J. Am. Chem. Soc.等SCI论文30余篇。论文总引用2000+，h-index 24。

Dr. Heng JIANG is now a professor at the College of Physics, Jilin University. He received his bachelor's and master's degree from Central South University in 2013 and 2016, respectively. In 2020, he obtained his Ph.D. from Oregon State University. From 2021 to 2023, he worked as a postdoctoral scholar at the Pennsylvania State University. His group's current research interest is to seek an understanding of new principles of electrolyte design, materials optimization, and electrochemical reactions for sustainable energy storage. He has published over 30 papers, including Nat. Sustain., JACS, Angew, AM, et al., with an H index of 24 and citations over 2000.

报告题目 / Title

功能化水系电解液设计和储能机制研究

Rational Design of Aqueous Electrolyte and its Storage Mechanism

张 冬
Dong ZHANG

张冬，男，吉林大学物理学院，教授，博士生导师。现主要从事新型高比能电池和水系电池等储能材料器件的设计与开发。作为项目负责人主持多项国家自然科学基金委，教育部和吉林省科技厅项目，目前在ACS Energy Lett., Nano Energy, Energy Environ. Mater.等国际著名期刊发表论文50 余篇，获得发明专利6项。

Dr. Dong ZHANG is a professor and doctoral supervisor at the School of Physics, Jilin University. He is currently engaged in the design and development of new high-energy-density batteries and aqueous battery energy storage materials and devices. As the project leader, he has presided over multiple projects funded by the National Natural Science Foundation of China, the Ministry of Education, and the Jilin Provincial Science and Technology Department. He has published over 50 papers in internationally renowned journals such as ACS Energy Lett., Nano Energy, Energy Environ. Mater., and has obtained 6 invention patents.

报告题目 / Title

水系锌离子电池负极界面调控与性能研究

Interface Regulation and Performance of Aqueous Zinc-Ion Battery Anode

田瑞源
Ruiyuan TIAN

田瑞源，吉林大学研究员，博士生导师，吉林大学物理学院新型电池物理与技术教育部重点实验室。长期从事高能量密度二次电池的相关研究工作，在高能量密度/高功率密度电池的开发、电池物理模型构建、厚电极膜设计等方面，取得了一系列研究成果。近年来发表高水平 SCI论文30余篇，包括Nat. Commun.，Adv. Energy Mater.，Adv. Funct. Mater.，ACS Nano，J. Power Sources等。

Dr. Ruiyuan TIAN is a doctoral supervisor at Key Laboratory of Physics and Technology for Advanced Batteries (Ministry of Education), College of Physics, Jilin University. He has worked on high energy density secondary batteries, and achieved a series of research achievements in the development of high energy density/high power density batteries, battery physical modelings and thick electrode film design. In recent years, he has published more than 30 high-level papers, including Nat. Commun., Adv. Energy Mater., Adv. Funct. Mater., ACS Nano, J. Power Sources, etc.

报告题目 / Title

厚电极膜精准设计与加工

High-Precision Design and Processing of Thick Electrode

张志锋
Zhifeng ZHANG

张志锋，沈阳工业大学电气工程学院教授、博士生导师。多年来一直从事电动航空高功率密度轴向磁通电推进系统、电动汽车的电驱动系统相关的教学、科研工作。在IEEE Transactions on Energy Conversion、中国电机工程学报等国内外重要刊物以第一作者或者通讯作者发表论文20余篇；以第一发明人获授权发明专利13项。

Dr. Zhifeng ZHANG is a professor and doctoral supervisor at the School of Electrical Engineering, Shenyang University of Technology. For many years, he has been engaged in teaching and research related to high-power density axial flux electric propulsion systems for electric aviation, electric drive systems for electric vehicles. He has published over 20 papers as the first author or corresponding author in important domestic and international publications such as IEEE Transactions on Energy Conversion and the Chinese Journal of Electrical Engineering; Authorized 13 invention patents as the first inventor.

报告题目 / Title

轴向磁通电机的国内外研究进展及在通用航空中的应用

Domestic and International Research Progress and Application in General Aviation of Axial Flux Motors

田 兵
Bing TIAN

田兵，2018年毕业于哈工大并获得电气工程博士学位，2018年至2020年于挪威科技大学从事博士后研究，课题为海底石油勘探系统的电气化技术，2020年受聘南京航空航天大学副研究员。研究兴趣包括多相电机的容错控制、无位置控制、滑模控制和重复控制等。

Dr. Bing TIAN received the Ph.D. degree in electrical engineering from the Harbin Institute of Technology in 2018. From 2018 to 2020, he was a Postdoctoral Research Fellow with the Norwegian University of Science and Technology, Trondheim, Norway, working on the electrification of the offshore production system. Since 2020, he has been a Associate Research Professor with the Department of Electrical Engineering, Nanjing University of Aeronautics and Astronautics. His current research interests include fault-tolerant control of multiphase drives, sensorless control of electric drives, sliding-mode controller/observer, and repetitive control.

报告题目 / Title

航空电作动系统无位置五相永磁同步电机的缺相容错控制技术

Open-Phase Fault-Tolerant Control for A Position Sensorless-Driven Five-Phase PMSM in the Aircraft Actuator

江 军
Jun JIANG

江军，研究员/博导/电气工程系副主任，南京航空航天大学长空学者，主要从事电气设备状态检测与故障诊断方面的研究工作。主持国家自然科学基金、省部级基金项目8项，参与国家重点研发计划1项，发表高水平论文50余篇，主编英文专著1部，授权国家、国际发明专利21项。现为IEEE Senior Member，担任Cigre D1/A2.77、Cigre WG B3/A3.60等工作组成员、中国电科院期刊中心青年专家团成员，研究成果获得中国电工技术学会科技进步奖一等奖1项。

Dr. Jun JIANG is a research professor with the Department of Electrical Engineering, Nanjing University of Aeronautics and Astronautics. He received the PhD degree in high voltage and electrical insulation from North China Electric Power University in 2016. During 2019-2020, he worked as an Academic Visitor/Honorary Staff in Department of Electrical & Electronic Engineering, School of Engineering, The University of Manchester, UK. At present, he is an IEEE Senior Member, CIGRE member, also a representative for CIGRE JWG D1/A2.77 (Liquid Tests for Electrical Equipment). He has published more than 60 papers. As well, more than 21 patents have been granted. His research interests are optical fiber sensing, condition monitoring of power apparatus and more-electric-aircraft.

报告题目 / Title

面向多电飞机应用场景下的光学传感技术研究

Optical Sensing Techniques for More-Electric Aircraft

吴晓刚
Xiaogang WU

吴晓刚，河北工业大学教授，博士生导师。主要从事储能系统集成与管理等方向的研究工作。作为项目负责人承担国家自然科学基金4项，黑龙江省自然科学基金重点项目1项。发表SCI收录论文50余篇，授权国家发明专利60余项。作为第一完成人获得黑龙江省科技进步二等奖和中国电源学会技术发明二等奖各1项。

Dr. Xiaogang WU, professor and doctoral supervisor of Hebei University of Technology. He is mainly engaged in the research of energy storage system integration and management. As the project leader, he undertook 4 projects of the National Natural Science Foundation and 1 key project of the Natural Science Foundation of Heilongjiang Province. He has published more than 50 SCI indexed papers and authorized more than 60 national invention patents. As the first complete person, he won the second prize of Science and Technology Progress of Heilongjiang Province and the second prize of technology invention of China Power Supply Society.

报告题目 / Title

高温固态氧化物电解池系统优化集成与控制

The Optimized Integration and Control of High Temperature Solid Oxide Electrolytic Cell System

刘 欣
Xin LIU

刘欣，哈尔滨理工大学“骨干人才计划”入选者，电气与电子工程学院教授/博士生导师。哈尔滨工业大学学士、硕士，澳大利亚阿德莱德大学博士（导师为乔世璋院士）。主要研究方向涵盖电化学能量储存与转化（绿氢/氨，水系电池等）、计算电化学模拟、机器学习辅助材料设计、以及电池健康预测等。刘欣教授以第一作者/通讯作者在Nat. Commun.、J. Am. Chem. Soc.、Adv. Mater.、ACS Catalysis、Nano Energy、ACS Energy Lett.、Chem. Eng. J.等国际学术期刊上发表多篇论文，其中2篇入选ESI热点论文、5篇入选ESI高被引论文，论文被引用超过4400次，H因子为24。

Dr. Xin LIU is professor at Harbin University of Science and Technology. He got his bachelor's and master's degrees from Harbin University of Technology, and PhD from the University of Adelaide, Australia (with Prof. Shi-Zhang Qiao). His research interests cover electrochemical energy storage and conversion, computational electrochemistry simulation, machine learning-assisted material design, and battery health prediction. Dr. LIU has published many top papers as the first /corresponding author in international academic journals such as Nat. Commun., J. Am. Chem. Soc., Adv. Mater., Chem. Eng. J., etc. He has been cited more than 4,400 times, and his h-index is 24.

报告题目 / Title

水系电化学界面能量存储及转化的原子尺度模拟

Atomic Simulation of the Aqueous Interface for Electrochemical Energy Storage and Conversion

张天栋
Tiandong ZHANG

张天栋，哈尔滨理工大学副教授、博士导师，韩国科学技术院(KAIST)的访问学者，2017年获哈尔滨工业大学材料物理与化学专业博士学位。主要从事电工绝缘材料和绝缘技术研究，具体包括薄膜电容器、电缆、电子封装等领域的绝缘材料。主持国家自然科学基金面上/青年/国际合作交流项目、黑龙江省优青项目等14项；以第一作者或通讯作者发表学术论文60篇，合著英文专著2部，授权国家发明专利6项，修订/制定国家标准3项。

Dr. Tiandong ZHANG is an Associate Professor of Harbin University of Science and Technology, China. He received his Ph.D degree in Materials Physics and Chemistry from Harbin Institute of Technology (HIT), China in 2017. He was a visiting scholar at the Korea Advanced Institute of Science and Technology (KAIST). He has lead 14 scientific research projects, has published 60 academic papers and 2 joint publications as the first or corresponding authors, 6 invention patents and 3 national standards. His research interests are focused on advanced insulation materials and insulation technology, including insulation materials used in film capacitors, electric cables and electronic packing.

报告题目 / Title

基于表面生长无机功能层的聚合物介电薄膜高温储能性能研究

High-Temperature Energy Storage of Polymer Dielectric Films by Coating Inorganic Functional Layers

姚诗余
Shiyu YAO

姚诗余，吉林大学物理学院副教授，博士生导师。近年来围绕着全固态锂/钠电池关键电极与电解质材料的设计与开发，全固态电池中动力学、化学力学效应等基本物理机制的研究，高功率钠离子电池电极材料的设计与开发开展了大量的研究工作，作为项目负责人主持参与多项国家自然科学基金委，吉林省科技厅和国防科工委项目，在包括Nat. Commun., Energy Environ. Sci.等国际著名杂志发表论文30余篇。

Dr. Shiyu YAO is an associate professor and doctoral supervisor at the College of Physics, Jilin University. Recently, she mainly focus on the design of electrodes and electrolyte materials for all-solid-state lithium/sodium batteries, the basic physical mechanisms of kinetics and chemomechanical effects in all-solid-state batteries, and the electrode materials for high-power sodium-ion batteries. As the project leader, she participated in the projects of the National Natural Science Foundation of China, Jilin Science and Technology Department, and National Defense Science and Industry Commission. She has published more than 30 papers in international journals, including Nat. Commun., Energy Environ. Sci.

报告题目 / Title

高体积比容量钠电负极材料的物理调控

Physical Engineering of High Volumetric Capacity Anodes for Sodium Batteries

项子旋
Zixuan XIANG

项子旋，江苏大学电气信息工程学院副教授，主要从事新能源电动汽车领域、高端智能农业装备领域等高转矩密度、高效率永磁电机系统设计、优化与应用研究。近年来，主持国家自然科学基金面上项目、国家重点研发计划子课题、中国博士后科学基金特别资助项目、国家自然科学青年基金项目等，并且参与国家自然基金重大项目、国家自然科学基金重点国际合作研究项目，以及江苏现代农业重大核心技术创新类项目（一类项目）等。研究至今，在IEEE Transactions上发表学术论文40余篇，其中入选“ESI高被引论文”2篇，并且荣获2018年度TIE期刊最佳论文奖1篇，授权中国发明专利2项，国际PCT专利1项。

Dr. Zixuan XIANG, an associate professor at the School of Electrical and Information Engineering, Jiangsu University, focuses primarily on the design, optimization, and application of high torque density and high efficiency permanent magnet motor systems within the realm of new energy electric vehicles and intelligent agricultural equipment. He has authored over 40 articles in IEEE Transactions, with 2 of them being recognized as "ESI Highly Cited Papers" and 1 receiving the esteemed 2018 TIE Journal Best Paper Award. He has been granted 2 Chinese invention patents and 1 international PCT patent.

报告题目 / Title

分布式驱动永磁轮毂电机研究与探索

Investigation and Exploration of Distributed Drive Permanent Magnet In-Wheel Motor

朱 凯
Kai ZHU

朱凯，博士，哈尔滨工程大学材料科学院与化学工程学院副教授/院长助理，“电化学工程兴海团队”骨干成员。2011年本科毕业于吉林大学物理学院，2016年获吉林大学凝聚态物理专业博士学位。2014-2016年在日本国立产业技术研究所进行交流学习，2020年-2022年在香港理工大学机械工程系从事“香江学者”计划研究。现从事二维储能材料的设计与可控合成、碱金属离子电池、水系电池等方面的研究。在Nat. Energy、Adv. Mater.等国际知名期刊已发表论文200余篇，H因子51。担任Nanoscale Horizons、Chinese Chemical Letters、Nano-Micro Letters等期刊青年编委、IEEE PES 中国区动力电池技术分委会理事。主持和参与国家自然科学基金、香江学者计划、黑龙江省自然科学基金等科研项目。

Dr. Kai ZHU is Associate Professor of Harbin Engineering University. He received his Ph.D. degree from Jilin University and the National Institute of Advanced Industrial Science and Technology in Japan in 2016. He worked in the Department of Mechanical Engineering of The Hong Kong Polytechnic University as a Kong Hong Scholar from 2020 to 2022. Dr. ZHU's research focuses on advanced energy storage systems such as lithium-ion batteries, sodium-ion batteries, and supercapacitors. Until now, he has published more than 200 papers in international academic journals including Nat. Energy, and Adv. Mater.

报告题目 / Title

水系锌离子电池金属锌负极界面修饰层设计与构筑

Design and Construction of Artificial Layer to Enable Dendrite-Free Zinc Metal Anode

于春来
Chunlai YU

于春来，副教授，分别于2004年、2006年和2013年获得哈尔滨工业大学电气工程学士、硕士和博士学位。2006年至2008年，在中国深圳艾默生网络电力公司担任研究工程师。2013-2020年，在国网黑龙江省电科院从事科研工作。自2020年开始在大连海事大学工作。目前其研究领域集中在无线电力传输和智能电网方面。

Dr. Chunlai YU is currently an associate Professor of Dalian Maritime University. He received Bachelor's, Master's, and Doctoral degrees in Electrical Engineering from Harbin Institute of Technology in 2004, 2006, and 2013, respectively. From 2006 to 2008, he worked as a research engineer at Emerson Network Power Company in Shenzhen, China. From 2013 to 2020, Dr. YU engaged in scientific research at State Grid Heilongjiang Electric Power Research Institute. Since 2020, he has been working at Dalian Maritime University. His current research focuses on wireless power transmission and smart grids.

报告题目 / Title

无线充电技术在船舶岸电中的应用

Wireless Power Transfer Technology for Shore-to-Ship Applications

Yulia LEKINA

Yulia LEKINA，南洋理工大学研究员，2015年于莫斯科国立大学获硕士学位，2021年于新加坡南洋理工大学获博士学位，其近期的研究方向集中在拉曼光谱、半导体、低维材料及其在高压下的结构转化。

Dr. Yulia LEKINA graduated with a Master's degree from Lomonosov's Moscow State University in 2015. In 2021 she completed a PhD program from Nanyang Technological University, where currently she is a research fellow. Her research interests are optical and Raman spectroscopy, semiconductors and low-dimensional materials, high pressure experiments.

报告题目 / Title

钙钛矿基异质结构材料：研究方法与展望

Perovskite-Based Heterostructures: Approaches and Perspectives

董 帅
Shuai DONG

董帅，哈尔滨工业大学副教授，博士生导师。从事无线充电磁耦合机构和电力电子变换器及其控制技术、电机驱动与控制等科研工作，出版科研学术专著1部，发表SCI/EI论文50余篇，授权国家发明专利20余项。主持/参与国家自然科学基金青年基金、中国博士后科学基金特别资助、国家重点研发计划子课题等。获中国电源学会技术发明奖一等奖、黑龙江省技术发明奖二等奖。

Dr. Shuai DONG, an Associate Professor and Ph.D. Supervisor at Harbin Institute of Technology. He is engaged in research in the fields of wireless charging electromagnetic coupling mechanisms, power electronic converters and their control techniques, as well as motor drive and control. He has authored one academic research monograph, published more than 50 SCI/EI papers, and been granted over 20 national invention patents. He has also led or participated in projects funded by the National Natural Science Foundation of China Youth Fund, the China Postdoctoral Science Foundation Special Fund, and sub-projects of the National Key R&D Program. Shuai DONG has received the first prize of the Technical Invention Award from the China Power Supply Society and the second prize of the Technical Invention Award from Heilongjiang Province.

报告题目 / Title

电动汽车动态无线供电系统输出波动抑制方法研究

Research on Output Fluctuation Suppression Method for Dynamic Wireless Power Transfer Systems of Electric Vehicles

班明飞
Mingfei BAN

班明飞，副教授，博士生导师，黑龙江省高层次人才，哈尔滨工业大学电气工程专业博士。2019年入职东北林业大学，现任电气工程专业主任。主要研究领域涉及高纬度低碳综合能源系统规划与运行、含清洁电源与电动汽车的电力系统协联优化调度、电力系统经济运行与大气污染防治协同优化策略、含分布式电源与储能的微电网及纳电网及基于风-光-储-无人机的智能化综合监测系统等。

Dr. Mingfei BAN, Associate Professor, Doctoral Supervisor, High-level Talent in Heilongjiang Province, PhD in EE from Harbin Institute of Technology. He joined Northeast Forestry University in 2019 and is currently the Head of the Department of EE. His research interesting involves high-latitude low-carbon integrated energy system, coordinated optimization dispatching of renewable energy and electric vehicles, collaborative optimization of power system dispatching and air pollution control, microgrids and nanogrids with distributed energy and storage, and intelligent comprehensive monitoring systems based on wind-solar-storage-drone, etc.

报告题目 / Title

基于电动汽车-无人机的灾后救援与恢复系统路径规划问题研究

Optimal Scheduling of EV-UAV System Providing Post-Event Relief and Recovery

洪剑锋
Jianfeng HONG

洪剑锋，北京交通大学电气工程学院副教授，入选校青年英才II类计划，入选清华大学“水木学者”计划。研究方向为舰艇/轨道交通/电动汽车用高性能永磁电机系统低振动噪声分析与减振降噪技术研究以及工业电机驱动设备在线监测与管理。主持和参与多项与电机系统振动噪声相关的科技部、国家重点研发、国家自然科学基金项目。发表与电机驱动系统振动噪声相关的SCI论文15篇，授权6项发明专利，研发的“电动葫芦用低振动高效率双速异步电机”和开发的“基于振动噪声的电机健康状态监测系统”已经在企业成功应用。

Dr. Jianfeng HONG received the Ph.D. degree from the Tsinghua University in 2019, and became a Postdoctoral Fellow with Tsinghua University during 2019-2022 in electrical engineering. He is currently an associate professor in Beijing Jiaotong University. His research interests include motor drives, vibroacoustic and its reduction method of electrical machines. He was selected as Outstanding Young Scientific and Technological Talents of Beijing jiaotong University in 2022. He has presided over or completed more than 10 projects such as the National Natural Science Foundation of China, provincial (ministerial), municipal and enterprise cooperation projects. The developed "Low-vibration and High-efficiency Dual-speed Asynchronous Motor for Electric Hoists" and "Motor Health Monitoring System Based on Vibration and Noise" have been successfully applied in the market.

报告题目 / Title

高品质牵引永磁电机系统振动噪声关键问题探讨

Discussion on Key Issues of Vibration and Noise in High-performance Traction Permanent Magnet Motor System

孙东阳
Dongyang SUN

孙东阳，哈尔滨理工大学，副教授/硕导，主要研究方向为特种船舶综合电力系统稳定控制。获得黑龙江省科学技术二等奖一项，主编编著专著一本，作为第一作者或通讯作者共录用及发表SCI检索收录文章11篇，EI检索收录文章6篇。

Dr. Dongyang SUN, Associate Professor/Master's Supervisor at Harbin Institute of Technology, mainly focuses on the stability control of integrated power systems for special ships. Received one second prize in Science and Technology in Heilongjiang Province, compiled one monograph, and as the first author or corresponding author, employed and published a total of 11 SCI indexed articles and 6 EI indexed articles.

报告题目 / Title

储能系统在舰船系统中的应用现状及未来发展

Application Status and Future Development of Energy Storage System in Ships and Warships System

李 枕
Zhen LI

李枕，哈尔滨理工大学电气与电子工程学院高电压技术系，副教授。2021年6月毕业于西安交通大学电气工程学院电气工程学院。主要研究方向为：1）电荷输运调制绝缘介质破坏机制和性能提升技术；2）SF_6替代性气体与等离子体技术；3）气-固界面沿面闪络理论研究和性能提升技术。参与发表论文40余篇，其中以个人第一作者或通讯作者发表SCI/EI论文21篇，担任High Voltage、Journal of Physics D: Applied Physics 等多个SCI期刊和国际会议独立审稿人。主持国家自然科学基金青年基金、黑龙江省自然科学基金、山东省自然科学基金等纵向课题4项，作为项目组核心人员参与国家自然科学基金重点项目、国家重点研发计划（子课题）、国际合作项目、企业横向课题等课题10余项。

Dr. Zhen LI is an associate professor of Harbin University of Science and Technology, graduated from Xi'an Jiaotong University in 2021. The research directions are: 1) Charge transport modulated insulation medium damage mechanism and performance improvement technology; 2) SF_6 alternative gas and plasma technology; 3) Gas-solid interface along-surface flashover theory research and performance improvement technology.

报告题目 / Title

基于分子链运动和电荷输运协同作用环氧复合材料高温击穿机理研究

Effects of Chain Dynamic and Charge Transport on Temperature-Dependent Breakdown Mechanism of Epoxy Composites

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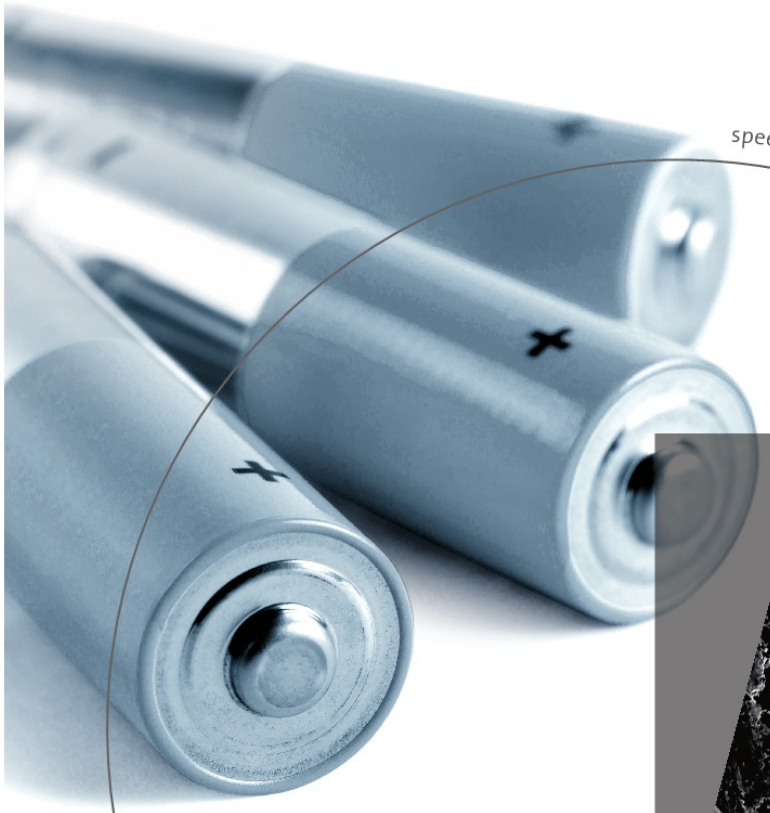

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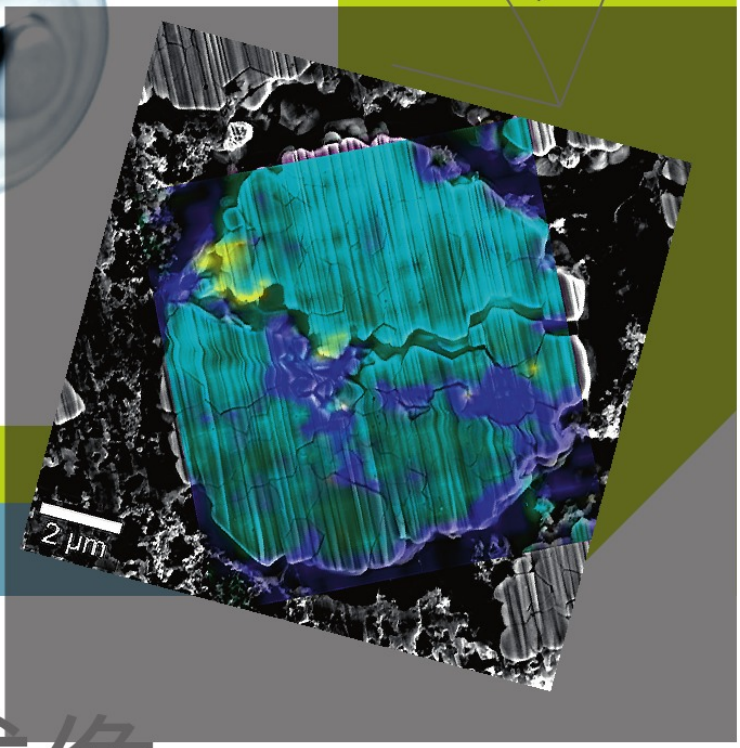

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