

2021 International Symposium on Structural Integrity
Hangzhou, China
October 8–11, 2021
<http://issi2021.china-sic.net>

Program



2021 International Symposium on Structural Integrity

Hangzhou, China

October 8-11, 2021

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Hosted by



Locally organized by

Zhejiang University of Technology

Hangzhou Special Equipment Inspection Institute

MOE Engineering Research Center of Process Equipment and Remanufacturing

Innovation Research Institute of Zhejiang University of Technology, Shengzhou

Co-organized by



Supported by

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Structural Integrity in the Context of Carbon Neutrality

Technical Program

Welcome from Chairs of ISSI2021	1
Committee of ISSI2021	2
Program at a glance	3
Registration	4
Day 1: Detailed Program	5
Day 2: Detailed Program	7
Day 3: Detailed Program	30
A list of posters	35

Welcome from Chairs of ISSI2021

Dear Colleagues,

Welcome! The 2021 International Symposium on Structural Integrity (ISSI2021) will be held at Hangzhou, China, by Zhejiang University of Technology, during October 8-11, 2021. The predecessor of the annual symposium, Fracture Mechanics series, took place each year from 2003 to 2009, was renamed as Structural Integrity series after 2010, and organized by China Structural Integrity Consortium (CSIC).



Carbon reduction has been closely bound up with the economy and social development. An increasing number of countries have issued their targets and roadmaps for carbon neutrality, which requires more efficient, energy-saving and reliable technology and equipment. The integrity of structures in the relevant industries, as a guarantee, plays an important role in the realization of carbon neutrality. All this underpins the theme of ISSI2021, ***“Structural Integrity in the Context of Carbon Neutrality”***.

A higher demand for structural integrity is brought to meet the requirements for carbon neutrality, either for ageing management or for design of advanced energy systems. To support the realization of carbon neutrality, it is necessary to improve structural integrity theory and technology in terms of failure evaluation, life prediction, repair and remanufacturing, safety inspection and health monitoring.



We are still in the difficult time period of COVID-19 virus spreading world widely. However, we strongly value the ISSI2021 as an important event to exchange ideas for academic progress, to network friendship with mutual encouragement, and to establish bridges to break isolation. Best student paper and poster awards will be bestowed at the closing session.

Hope you enjoy the conference and life in Hangzhou.
With the very best wishes,

Prof. Shan-Tung Tu

A handwritten signature in black ink, appearing to read 'Shan-Tung Tu'.

Symposium Series Chairman

East China University of Science & Technology,
China

Prof. Zengliang Gao

A handwritten signature in black ink, appearing to read 'Zengliang Gao'.

ISSI2021 Executive Chairman

Zhejiang University of Technology,
China

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Wenjian Zheng (ZJUT, zwj0322@zjut.edu.cn)

Program at a glance

Day	Time	Event	Place
Oct 8	10:00—22:00	Registration	Hotel lobby
	15:00—17:00	Seminar (invitation based)	Longjing Hall
Oct 9	08:30—08:45	Conference opening	Jinxu Hall
	08:45—10:15	Series session 1	Jinxu Hall
	10:15—10:30	Group photos & coffee break	
	10:30—12:00	Series session 2	Jinxu Hall
	12:00—	Lunch	
	14:00—15:30	Series session 3	Jinxu Hall
	15:30—16:00	Coffee break	
	16:00—18:30	Series session 4	Jinxu Hall
	18:30—	Conference dinner	Jinxu Hall
Oct 10	08:30—10:10	Panel discussions 1 & Parallel sessions 1-7	
	10:10—10:30	Coffee break	
	10:30—12:10	Parallel sessions 8-14 & Student paper competition 1	
	12:10—	Lunch	
	13:30—15:30	Parallel sessions 15-21 & Student paper competition 2	
	15:30—16:00	Coffee break	
	16:00—17:50	Parallel sessions 22-28 & Student paper competition 3	
	16:00—18:30	Poster Q&A session	Longjing Hall
	18:30—	Buffet for dinner	
Oct 11	08:30—10:00	Parallel sessions 29-35	
	10:00—11:00	Closing ceremony	Guiyu Hall
	14:00—18:00	Technical visiting (some participants only)	
End			

REGISTRATION

10:00—22:00	On-site registration <i>Deefly Zhejiang Hotel, 278 Santaishan Road, Hangzhou, China</i>
18:00—	Reception buffet <i>Deefly Zhejiang Hotel, 278 Santaishan Road, Hangzhou, China</i>

- The symposium registration is open from 10am to 10pm on Oct 8, 2021, at the main lobby of the **Deefly Zhejiang Hotel**, located at 278 Santaishan Road, Hangzhou, 310007, Zhejiang, China
- Later participants who cannot arrive on Oct 8, 2021 can register at the symposium reception center on the morning of Oct 9/10, 2021 from 8am to 9am.
- Registration fee will be 360 USD (2600RMB). Students are welcome with a reduced registration fee of 270 USD (1800RMB). The registration fee covers admission to all Parallel sessions; two refreshment breaks each day of the conference, lunches, dinners, conference banquet, and a copy of the conference proceedings, but not accommodation.



Registration/Conference/Accommodation location: Deefly Zhejiang Hotel (278 Santaishan Road, Hangzhou, China)

注册/会议/住宿地址: 蝶来浙江宾馆 (浙江省杭州市西湖区三台山路 278 号)

Day 1: Detailed Program

Conference Opening

//锦绣厅(Jinxiu Hall)

Session chair: Zengliang Gao (Zhejiang University of Technology, China)

08:30	Opening speech Shan-Tung Tu, Chairman of Symposium Series <i>East China University of Science and Technology, China</i>
08:35	Welcome address <i>President of Zhejiang University of Technology, China</i>
08:40	Welcome and program introduction Zengliang Gao, Executive chairman of ISSI2021 <i>Zhejiang University of Technology, China</i>

Series session 1

//锦绣厅(Jinxiu Hall)

Session chair: Shan-Tung Tu (East China University of Science and Technology, China)

08:45—09:15	Fracture strength behaviors of ultra-high-temperature materials Daining Fang <i>Beijing Institute of Technology, China</i>
09:15—09:45	Mechanisms of fracture and damage-tolerance in new metallic alloys Robert O. Ritchie <i>University of California-Berkeley, USA</i>
09:45—10:15	Fatigue fracture of materials and structures Wanlin Guo <i>Nanjing University of Aeronautics and Astronautics, China</i>
10:15—10:30	Group photo & coffee break

Series session 2

//锦绣厅(Jinxiu Hall)

Session chair: Zengliang Gao (Zhejiang University of Technology, China)

10:30—11:00	Challenges and technology enablers for design and manufacture of multi-materials lightweight structures for achieving carbon neutrality Pingsha Dong <i>University of Michigan, USA</i>
11:00—11:30	Multiscale understanding of plasticity of nanoscale Al-Al ₂ Cu eutectic alloys Jian Wang <i>University of Nebraska-Lincoln, USA</i>
11:30—12:00	Electrolytes for high energy Li-ion and Li metal batteries Chunsheng Wang

Oct 9, 2021

University of Maryland, USA

12:00— Lunch

Series session 3

//锦绣厅(Jinxiu Hall)

Session chair: Jianming Gong (Nanjing Tech University, China)

14:00—14:30 **Structural integrity monitoring and enhancement using additively manufactured sensors**

Pengyu Zhou, Yiyin Su, **Zhongqing Su**

Hong Kong Polytechnic University, China

14:30—15:00 **State of the art and knowledge gaps in storage of high pressure gaseous hydrogen**

Jinyang Zheng

Zhejiang University, China

15:00—15:30 **Acoustic emission testing—a practical technique for evaluating the structural integrity of pressure vessels**

Gongtian Shen, Y. Shen, J. Zhang

China Special Equipment Inspection and Research Institute, China

15:30—16:00 **Coffee break**

Series session 4

//锦绣厅(Jinxiu Hall)

Session chair: Jinhua Shi (Suzhou Nuclear Power Research Institute, China)

16:00—16:30 **Processing parameter optimization and fatigue cracking mechanisms of actively manufactured Ti-6Al-4V**

Youshi Hong

Institute of Mechanics, Chinese Academy of Sciences, China

16:30—17:00 **Offshore wind energy for a green industrial revolution: Structural integrity challenges and opportunities**

Ali Mehmanparast

Cranfield University, UK

17:00—17:30 **Analysis and data-driven design of quasi-disordered FCC lattice metamaterials**

A.S. Bhuwal, T. Liu, I. Ashcroft, **Wei Sun**

University of Nottingham, UK

17:30—18:00 **Structural integrity assessment of reactor pressure vessel under severe conditions**

Zengliang Gao

Zhejiang University of Technology, China

18:30—20:30 **Conference dinner**

Day 2: Detailed Program

Panel discussion 1: Funding Policy

//桂雨厅(Guiyu Hall)

Session chair: Shan-Tung Tu (East China University of Science and Technology, China)

09:30—10:10	Invited speech Fundamental researches needed to underpin structural integrity Mingliang Zhu <i>East China University of Science and Technology, China</i> Discussion
10:10—10:30	Coffee break

Parallel session 1: Structural Integrity and Carbon Reduction

//龙井厅

(Longjing Hall)

Session chair: Wenchun Jiang (China University of Petroleum(East China), China)

08:30—08:50	Keynote lecture Carbon reduction through quality and reliability Jianhua Zhou <i>JHZ Strategic QA, USA</i>
08:50—09:10	Keynote lecture Accumulated emissions from power plants in its operational lifetime Jia Li, Yihe Miao <i>Shanghai Jiao Tong University, China</i>
09:10—09:30	Keynote lecture Contribution of marine clean energy to carbon neutral: R&D and large-scale application of LHD marine tidal power station Dong Lin <i>Hangzhou Lindong New Energy Technology Co., LTD., China</i>
09:30—10:30	Coffee break

Parallel session 2: Advanced Materials Testing

//玉兰厅(Yulan Hall)

Session chair: Chengqi Sun (Institute of Mechanics, Chinese Academy of Sciences, China)

08:30—08:50	Keynote lecture Residual stress characterisation techniques and applications Shu Yan Zhang <i>Centre of Excellence for Advanced Materials, China</i>
08:50—09:10	Keynote lecture The recent developments on ultrasonic fatigue testing method for very

	high cycle fatigue Victor Postel, Dongtang Yang, Kai Tan, Seng Tang, Yongtao Hu, Yujia Liu, Chong Wang , Qingyuan Wang <i>Sichuan University, China</i>
09:10—09:25	Investigation of distribution of residual stress in swing arc narrow gap MAG welding by numerical simulation and experiments Guangkai Zhang , Chunwei Ma, Gang Xu, Zhenxiong Liu <i>Shanghai University of Engineering and Science, China</i>
09:25—09:40	A fast residual stress estimation scheme for fitness for service assessment of pipe Shaopin Song , Xianjun Pei, Pingsha Dong <i>University of Michigan, China</i>
09:40—09:55	Comparison of hydrogen diffusion under constant and cyclic load: Effect of stress concentration factor Chenyu Zhao , Weiming Yu, Ping Tao, Jianming Gong <i>Nanjing Tech University, China</i>
09:55—10:10	Dynamic ductile-brittle transition and fracture toughness measurement of metal under intermediate-low loading velocities Yilei Li , Di Yao <i>Reactor Engineering Research Sub-institute, China</i>
10:10—10:30	Coffee break

Parallel session 3: Low Cycle Fatigue

//花港厅(Huagang Hall)

Session chair: Weiya Jin (Zhejiang University of Technology, China)

08:30—08:50	Keynote lecture Fatigue of magnesium alloys Yanyao Jiang <i>University of Nevada-Reno, USA</i>
08:50—09:10	Keynote lecture Highly stressed volume approach in notch fatigue analysis: Recent advances and challenges Jin-Chao He, Shun-Peng Zhu , Xiao-Peng Niu, Jie-Wei Gao <i>University of Electronic Science and Technology of China, China</i>
09:10—09:25	The influence of low cycle fatigue damage on the SCC susceptibility of nuclear power turbine rotor steel Nan Wang , Yuhui Huang, Fu-Zhen Xuan <i>East China University of Science and Technology, China</i>
09:25—09:40	A unified elastic-plastic framework including cyclic hardening/softening for 316H low cyclic fatigue behaviors at room temperature and elevated temperature: experiment and modeling Kai Song , Lei Zhao, Lianyong Xu, Yongdian Han <i>Tianjin University, China</i>

09:40—09:55	Tensile mechanical properties, deformation mechanisms, fatigue behavior and fatigue life of 316H austenitic stainless steel: Effects of grain size Xueyan Qi , Lei Zhao, Lianyong Xu <i>Tianjin University, China</i>
09:55—10:10	A new multiaxial fatigue life prediction method for U-shaped specimens Jianhui Liu , Rong Zi, Yaobing Wei, Ruilong Zhang <i>Lanzhou University of Technology, China</i>
10:10—10:30	Coffee break

Parallel session 4: Creep Mechanism & Life Prediction

//暹罗湾

(Xianluowan Hall)

Session chair: Xiaowei Wang (Nanjing Tech University, China)

08:30—08:50	Keynote lecture Effect of grain size on tensile and creep behaviour of 304HCu SS and modelling of creep curves A. Jeyaraj, V.D. Vijayanand, V. Ganesan, G.V. Prasad Reddy, S. Sankaran, S.L. Mannan <i>AICTE-INAE Distinguished Visiting Professor, GCE Salem and Veltech Chennai, India</i>
08:50—09:05	Creep residual life evaluation for Ti43Al5V4Nb using Ω method Zhi Cai , Noritake Hiyoshi <i>University of Fukui, Japan</i>
09:05—09:20	Effect of solution treatment on creep properties of Inconel625/ BNi-2 brazed joint Yu-Cai Zhang <i>China University of Petroleum (East China), China</i>
09:20—09:35	Damage and creep behavior in planar SOFC by modeling of multiphysics coupled Ming Song , Shuai Ma, Chuansheng Du, Bingying Wang, Wenchun Jiang <i>China University of Petroleum(East China), China</i>
09:35—09:50	Research on creep resistance based on stress relaxation behavior of a directionally solidified nickel-based alloy Tieshan Cao , Qiao Chen, Congqian Cheng, Jie Zhao <i>Dalian University of Technology, China</i>
09:50—10:05	Nanoindentation characterization on the remaining creep behavior and fracture behavior of 9%Cr steel under prior conventional creep loading Yuxuan Song , Zhouxin Pan, Ting Yu, Weiya Jin, Yi Ma, Zengliang Gao <i>Zhejiang University of Technology, China</i>
10:05—10:20	Evolution of precipitates at grain boundary in an alumina-forming austenitic stainless steel during creep Hongyuan Wen, Bingbing Zhao, Xianping Dong, Lanting Zhang

10:20—10:30	Coffee break
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Parallel session 5: Structure Health and Integrity Monitoring //水仙厅

(Shuixian Hall)

Session chair: Jiuhong Jia (East China University of Science and Technology, China)

08:30—08:50	Keynote lecture Infrared thermography and machine learning methods for nondestructive testing of defects in carbon fiber composites Kaixin Liu, Jianguo Yang, Yuan Yao, Yi Liu <i>Zhejiang University of Technology, China</i>
08:50—09:05	Structure health monitoring of cast manganese steel crossings using acoustic emission Shengrun Shi <i>Centre of Excellence for Advanced Materials, China</i>
09:05—09:20	Safety assessment method for pressure vessels over design life Qing Zhao <i>Jiangsu Province Special Equipment Supervision Institute, China</i>
09:20—09:35	Research on the evaluation of tensile damage in typical steels for pressure vessel by nonlinear Lamb wave Jianxun Li, Weiqiang Wang <i>Shandong University, China</i>
09:35—09:50	State estimation and structural health monitoring in thermal-mechanical problems using model-order reduction approach Genghui Jiang, Han Wang, Zhenwei Cai, Weizhe Wang, Yingzheng Liu <i>Shanghai Jiao Tong University, China</i>
09:50—10:05	Data augmentation and application of LCF data based on GAN model Xingyue Sun, Kai Song, Shouwen Shi, Xu Chen <i>Tianjin University, China</i>
10:05—10:25	Coffee break

Parallel session 6: Structural Integrity of Biologically Inspired Materials

//梅花厅(Meihua Hall)

Session chair: Yun-Fei Jia (East China University of Science and Technology, China)

08:30—08:50	Keynote lecture A floquet-based bar-spring model for load-bearing biological and bioinspired composites Zuoqi Zhang <i>Wuhan University, China</i>
08:50—09:10	Keynote lecture Strength and ductility of layered metals revised from local stress and local strain

	Guohua Fan <i>Nanjing Tech University, China</i>
09:10—09:25	Fracture resistance of the multilayered structure of turtle carapace Bingbing An , Min Xu, Dongsheng Zhang <i>Shanghai University, China</i>
09:25—09:40	Wood-inspired cement and gypsum materials with high strength and multi-functionality Kefeng Gao , Faheng Wang, Zenqian Liu, Zhefeng Zhang <i>Institute of Metal Research, Chinese Academy of Sciences, China</i>
09:40—09:55	Low-cycle fatigue behavior and crack propagation of Mg-9Gd-4Y-2Zn-0.5Zr with the bimodal structure and long-period stacking ordered (LPSO) phase Jinsheng Ji , Zhimin Zhang, Yong Xue <i>North University of China, China</i>
09:55—10:10	Gradient structure induced strength-ductility synergy and enhanced fatigue property in pure titanium Xiao Li , Yunfei Jia, Xiancheng Zhang <i>East China University of Science and Technology, China</i>
10:10—10:30	Coffee break

Parallel session 7: International Workshop on Battery Safety and Reliability 1 //春晓厅(Chunxiao Hall)

Session chair: Weiling Luan (East China University of Science and Technology, China)

08:30—08:55	Keynote lecture Deeper inside understanding of lithium-ion battery safety Xiangming He <i>Tsinghua University, China</i>
08:55—09:20	Keynote lecture Safety design and modification of rechargeable battery Zhaoyin Wen <i>Shanghai Institute of Ceramics, CAS, China</i>
09:20—09:45	Keynote lecture The status of safety and reliability of fuel cell systems for vehicle application Zhongjun Hou , Junling Jiang, Jun Cai <i>Shanghai Hydrogen Propulsion Technology Co., Ltd., China</i>
09:45—10:10	Keynote lecture Research on fuel cell power system freeze start typical failure modes and mitigation strategies Yang Hu , Shuang Zhai <i>Shanghai REFIRE Technology Co., Ltd, China</i>
10:10—10:30	Coffee break

Parallel session 8: Structural Integrity Assessment

//龙井厅(Longjing Hall)

Session chair: Guodong Zhang (Suzhou Nuclear Power Research Institute, China)

10:30—10:50	Keynote lecture Structural integrity assessment for deep-water subsea pipelines Nian-Zhong Chen <i>Tianjin University, China</i>
10:50—11:05	Temperature-dependent fatigue crack propagation behavior of fuel cell membrane Jiayao Li, Shouwen Shi, Xu Chen <i>Tianjin University, China</i>
11:05—11:20	The mechanical characterization of the composite film of battery package: based on quick solver of orthotropic elastoplastic and hyperelastic multi-layer composite behavior Pengfei Ying <i>Tsinghua University, China</i>
11:20—11:35	Research on creep fatigue interaction life prediction for superalloy rotor of heavy-duty gas turbine Minjin Tang <i>Suzhou Nuclear Power Research Institute, China</i>
11:35—11:50	Simulation study of repair welding residual stress of high temperature pressure pipe under extended service Bin Yang <i>China University of Petroleum (East China), China</i>
11:50—12:05	Review of defects of railway axle and its surface hardening processes from perspective of structural integrity Jie-Wei Gao, Shun-Peng Zhu, Jin-Chao He, Xiao-Peng Niu <i>University of Electronic Science and Technology of China, China</i>
12:10—	Lunch

Parallel session 9: Advanced Materials Modeling

//玉兰厅(Yulan Hall)

Session chair: Xiang Guo (Tianjin University, China)

10:30—10:50	Keynote lecture Design and fabrication of mechanical metamaterials for impact mitigation Youchuan Zhou, Lin Ye <i>The University of Sydney, Australia</i>
10:50—11:05	Experimental and simulation study of fatigue failure mechanisms in powder metallurgy superalloy FGH4098 Rong Jiang <i>Nanjing University of Aeronautics and Astronautics, China</i>

11:05—11:20	A CDM-based LCF life model for a DS Ni-based superalloy considering the effect of rafting Yongsheng Fan , Xiaoguang Yang, Long Tan, Duoqi Shi, Yantao Sun <i>Beihang University, China</i>
11:20—11:35	A visco-hyperelastic damage constitutive model for solid propellant Chuantao Hou , Ruisi Xing, Long Wang, Fengtao Zhang <i>Beijing Institute of Structure and Environment Engineering, China</i>
11:35—11:50	The study of propagation behaviors of small cracks in powder metallurgy nickel-base superalloy FGH4096 Qinzheng Yang , Xiaoguang Yang, Duoqi Shi <i>Beihang University, China</i>
11:50—12:05	Multi-scale simulation of deformation behavior of SAC305 solder using crystal plasticity finite element method Mingwei Xie , Gang Chen <i>Tianjin University, China</i>
12:10—	Lunch

Parallel session 10: Low Cycle Fatigue

//花港厅(Huagang Hall)

Session chair: Duoqi Shi (Beihang University, China)

10:30—10:50	Keynote lecture Random ratchetting fatigue damage of a cryogenic liquid semitrailer tank under road spectrum load Bingjun Gao <i>Hebei University of Technology, China</i>
10:50—11:05	Study on degradation and fatigue behavior of gasket material in simulated PEM fuel cell environments Gang Liang , Wei Xia, Zhiqiang Wang, Zicheng Zhang, Jinzhu Tan <i>Nanjing Tech University, China</i>
11:05—11:20	Microstructure evolution in a Ni-Cr-Co based superalloy under high-temperature low cycle fatigue deformation Kaimeng Wang , Hongyang Jing, Lianyong Xu, Lei Zhao, Yongdian Han <i>Tianjin University, China</i>
11:20—11:35	Inhomogeneous rafting features and LCF behacviour of a single crystal Ni-based superalloy with a central hole Long Tan , Xiaoguang Yang, Yongsheng Fan, Duoqi Shi, Yantao Sun <i>Beihang University, China</i>
11:35—11:50	Cyclic deformation behavior and life prediction of P92 steel welded joints under thermomechanical fatigue loading Wei Zhang , Guo Shen, Jianming Gong, Changyu Zhou <i>Nanjing Tech University, China</i>
11:50—12:05	Improving fatigue properties of SAF2205 cruciform welded joint by cavitation jet peening

Hong-Xiang Zheng, Yun Luo, Yu-Cai Zhang, Wenchun Jiang
China University of Petroleum (East China), China

12:10— Lunch

Parallel session 11: Creep-Fatigue Interaction

//暹罗湾(Xianluowan Hall)

Session chair: Jian Chen (Changsha University of Science and Technology, China)

10:30—10:50	Keynote lecture The acceleration mechanism of the degradation of the strength of heat-resistant alloys under creep-fatigue loading at elevated temperatures Yifan Luo, Yukako Takahashi, Shujiro Suzuki, Ken Suzuki, Hideo Miura <i>Tohoku University, Japan</i>
10:50—11:05	Creep-fatigue interaction responses and life prediction of GH4169 superalloy under overload conditions Zitong Kang , Xiaowei Wang, Jianming Gong <i>Nanjing Tech University, China</i>
11:05—11:20	Insight into the damage behavior in different micro-regions of P92 steel weldment under sequential cyclic loading and creep loading Xiaowei Wang , Wei Zhang, Zitong Kang, Jianming Gong <i>Nanjing Tech University, China</i>
11:20—11:35	The investigation on the creep-fatigue life prediction method for P92 steel and welded joint Zengliang Gao, Ting Yu , Zhouxin Pan, Weiya Jin, Yuxuan Song <i>Zhejiang University of Technology, China</i>
11:35—11:50	Creep-fatigue failure mechanism and life prediction of thin-walled plate specimen with film cooling holes Hengbin Zhang , Zhenlei Li, Duoqi Shi, Xiaoguang Yang <i>Beihang University, China</i>
11:50—12:05	An investigation of high-temperature microstructural evolutions and creep-fatigue behaviors of CMSX-4 brazed joints Gangqiang Chen , Chuanyang Lu, Yanming He, Jianguo Yang, Zengliang Gao <i>Zhejiang University of Technology, China</i>
12:10—	Lunch

Parallel session 12: Structural Integrity of Nuclear Power Equipment

//梅花厅(Meihua Hall)

Session chair: Shiyi Bao (Zhejiang University of Technology, China)

10:30—10:50	Keynote lecture Recent development of probabilistic fracture mechanics analysis code PASCAL for reactor pressure vessels Yinsheng Li , Jinya Katsuyama, Hisashi Takamizawa <i>Japan Atomic Energy Agency, Japan</i>
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10:50—11:05	Overview of AFCEN non-linear benchmark – Improving rules for vessel ratcheting evaluation Thomas Metais <i>Yuansuan/EDF, China</i>
11:05—11:20	Strength analysis on radial nozzle opening reinforcement with enforcement pad at shell of pressure vessel Jianhua Zhang, Guodong Zhu, Guoshan Xie, Juan Wang <i>China Special Equipment Inspection and Research Institute, China</i>
11:20—11:35	Analysis of mechanical response of pressure vessels under severe accidents Peng Tang <i>Nuclear Power Institute of China, China</i>
11:35—11:50	Allowable planar flaw indication for exceed-accepted defects in RPV cylinders Yuebing Li, Zhancheng Yang, Ting Jin, Pan Liu, Yuebao Lei, Zengliang Gao <i>Zhejiang University of Technology</i>
11:50—12:05	Evaluation of RPV closure head penetration integrity considering fitting stress and WRS Mingya Chen, Minyu Fan, Hongbo Gao, Lei Lin, Weiqiang Wang, Jinhua Shi, Guodong Zhang <i>Shandong University, China</i>
12:10—	Lunch

Parallel session 13: Reliability-Centered Design, Manufacturing and Maintenance //水仙厅(Shuixian Hall)

Session chair: Ke Wang (Zhengzhou University, China)

10:30—10:50	Keynote lecture Damage control and it's detection of plasma sprayed thermal barrier coatings Weize Wang, Shan-Tung Tu, Xian-Cheng Zhang, HuangJie Fang, JiBo Huang, DongDong Ye <i>East China University of Science and Technology, China</i>
10:50—11:05	Evaluating of heat treatment quality of steel cylinder using magnetic properties Zhengxiang Shen <i>Ningbo Special Equipment Inspection & Research Institute, China</i>
11:05—11:20	Effect of excitation load on wear behavior of steam generator tube Xuxin Dong, Mingjue Zhou, Lichen Tang, Weiya Jin, Zengliang Gao, Yuebing Li <i>Zhejiang University of Technology, China</i>

11:20—11:35	Experimental study on 7050-T7451 aluminum alloy by oblique laser shock peening Feifan Zhao, Xiangfan Nie, Yang Li, Yinghong Li <i>Air Force Engineering University, China</i>
11:35—11:50	Improvement of mechanical property of 6082-T6 aluminum alloys friction stir welds with the kissing bond defect Hang Liang, Rui Zhan, Dongpo Wang, Caiyan Deng, Lei Cui, Wei Guan <i>Tianjin University, China</i>
11:50—12:05	Research on sealing characteristics of C-ring based on NiTi alloy Chao Shen, Bin Zhang <i>Changshu Institute of Technology, China</i>
12:10—	Lunch

Parallel session 14: International Workshop on Battery Safety and

Reliability 2 //春晓厅(Chunxiao Hall)

Session chair: Zhaoyin Wen (Shanghai Institute of Ceramics, CAS, China)

10:30—10:55	Keynote lecture Power battery: whole life cycle safety mechanism and active regulation Weiling Luan, Sengming Wu, Yiming Yao, Haihua Xv, Shan-Tung Tu <i>East China University of Science and Technology, China</i>
10:55—11:20	Keynote lecture Battery accident investigation: principles, mechanisms and countermeasures Xuning Feng <i>Tsinghua University, China</i>
11:20—11:45	Keynote lecture Safety testing & evaluation of traction battery Fang Wang, Tianyi Ma, Shiqiang Liu <i>China Automotive Technology and Research Center Co, Ltd, China</i>
11:45—12:10	Keynote lecture China battery failure to safety standards Penglin He <i>China Electronics Standardization Institute, China</i>
12:10—	Lunch

Student Paper Competition 1

//桂雨厅(Guiyu Hall)

Session chair: Jianming Gong (Nanjing Tech University, China)

10:30—10:50	Residual life assessment of Heavy-duty railway wagon knuckle based on
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	crack propagation failure mechanism with hypothetical distribution Chao Wang , Tao Zhu, Bing Yang, Xiaochen Tian, Yuhao Gong, Shoune Xiao, Guangwu Yang <i>Southwest Jiao tong University, China</i>
10:50—11:10	A crystal plasticity based model for cyclic deformation under hybrid stress-strain controlled loading Dewen Zhou , Xiaowei Wang, Jianming Gong <i>Nanjing Tech University, China</i>
11:10—11:30	A physics-based approach for creep-fatigue-oxidation life prediction of P92 Kangkang Wang , Jian-Feng Wen, Shan-Tung Tu <i>East China University of Science and Technology, China</i>
11:30—11:50	Multiaxial creep life and damage evaluation for type 304 stainless steel using miniature cruciform specimen Kyousuke Tsuboyama , Noritake Hiyoshi <i>University of Fukui, Japan</i>
11:50—12:10	Modelling of constitutive behavior and prediction of multiaxial creep-fatigue damage evolution under non-proportional loading at elevated temperature Le Xu , Ji Wang, Run-Zi Wang, Lei He, Takamoto Itoh <i>Ritsumeikan University, Japan</i>
12:10—	Lunch

Parallel session 15: High Cycle Fatigue

//龙井厅(Longjing Hall)

Session chair: Chong Wang (Sichuan University, China)

13:30—13:50	Keynote lecture EBSD observation of microstructure characteristic at crack tip and beneath mated crack surfaces in very high cycle fatigue Chengqi Sun <i>Institute of Mechanics, Chinese Academy of Sciences, China</i>
13:50—14:05	High-temperature failure mechanism of TC17 titanium alloy in high cycle fatigue Gen Li , Chengqi Sun <i>Institute of Mechanics, Chinese Academy of Science, China</i>
14:05—14:20	Effect of laser shock peening on high cycle fatigue properties of aluminized AISI 321 stainless steel Wei Li , Huitao Chen, Weiying Huang, Jian Chen, Lu Zuo, Cong Li, Jianjun He, Yanjie Ren, Shengde Zhang <i>Changsha University of Science & Technology, China</i>
14:20—14:35	VHCF behavior of welded joints with HFMI-treated under moisture conditions Zhiwei Gao , Dongpo Wang, Baoming Gong

	<i>Tianjin University, China</i>
14:35—14:50	Fine granular area formation by damage-induced shear strain localization in very high cycle fatigue Feng Yu <i>Ningbo University, China</i>
14:50—15:05	High temperature in-situ fretting fatigue and crystal plasticity simulation of Ni-based single crystal superalloys Yue Su, Qinan Han, Huiji Shi <i>Tsinghua University, China</i>
15:05—15:20	Numerical and experimental investigation of fretting fatigue in mortise structure machined from nickel-based superalloy Kaiwen Guo, Yuan Huang <i>Tsinghua University, China</i>
15:20—15:35	Influence of WEA formation considering the phase state and crystal orientation around an inclusion under rolling contact fatigue Huanjie Zhang, Shuxin Li <i>Ningbo University, China</i>
15:30—16:00	Coffee break

Parallel session 16: Creep & Corrosion

//花港厅(Huagang Hall)

Session chair: Cong Li (Changsha University of Science & Technology, China)

13:30—13:50	Keynote lecture Impression creep and small punch creep studies on nuclear structural materials M.D. Mathew, Naveena <i>Dean – Postgraduate Studies and Research Saintgits College of Engineering Kottayam, India</i>
13:50—14:10	Keynote lecture Modeling and simplified formulas to quantify hardening effect on stress corrosion cracking in high temperature water environments Guangfu Li, Tetsuo Shoji <i>Shanghai Research Institute of Materials (SRIM), China</i>
14:10—14:25	Analysis on deterioration of 800HT steel Zhifeng Li, Baoxi Lu, Gang Chen <i>China Special Equipment Inspection & Research Institute, China</i>
14:25—14:40	A MDC case of ASME SA335 Gr P9 alloy steel furnace tube in high-temperature carbon-containing atmosphere environment Zhi-cheng Wang <i>Special Equipment Safety Supervision Inspection Institute of Jiangsu Province, China</i>
14:40—14:55	Effects of nano-Al2O3 on stator material for screw pumps under swage Wenjun Zhao, Wei Xia, Zenhui Liu, Zicheng Zhang, Jinzhu Tan

	<i>Nanjing Tech University, China</i>
14:55—15:10	Investigation on pitting corrosion of heat exchange tube in a reboiler Zhuangzhuang He, Kaishu Guan <i>East China University of Science and Technology, China</i>
15:10—15:25	A new approach for identifying corrosion damage from acoustic emission signals using ensemble empirical mode decomposition and linear discriminant analysis Mengyu Chai, Zheyu Gao, Quan Duan, Zaoxiao Zhang <i>Xi'an Jiaotong University, China</i>
15:25—15:40	Sodium corrosion effect and creep-fatigue stress interaction analysis of nuclear grade 316 stainless steel Yaonan Dai, Xiaotao Zheng, Jiuyang Yu <i>Wuhan Institute of Technology, China</i>
15:40—16:00	Coffee break

Parallel session 17: Residual Stress

//梅花厅(Meihua Hall)

Session chair: Jianguo Yang (Zhejiang University of Technology)

13:30—13:45	Effect of water jet treatment on the residual stresses and fatigue life of welded joint Yun Luo, Hong-Xiang Zheng, Wenchun Jiang <i>China University of Petroleum(East China), China</i>
13:45—14:00	Through-section residual stress in the aluminum forgings: The contour measurement Zheng Zhang, Xiaobin Yue, Jinxing Kong <i>China Academy of Engineering Physics, China</i>
14:00—14:15	Application of PWHT in improving properties of martensitic heat resistant steel thick plate by CMT welding Haoyu Cai, Lianyong Xu, Yongdian Han, Lei Zhao <i>Tianjin University, China</i>
14:15—14:30	Strength mismatch effect on residual stress of 10CrNi3MoV steel multipass butt-welded joints Wei Song <i>Xuzhou University of Technology, China</i>
14:30—14:45	Effect of initial surface crack on residual stress of typical welded joints of FPSO Liangbi Li <i>Jiangsu University of Science and Technology, China</i>
14:45—15:00	Residual stress measurement and correction with the contour method for round-rod titanium alloy specimen prepared by selective laser melting Chuan Liu, Jie Zhang <i>Foshan University, China</i>

15:00—16:00 Coffee break

Parallel session 18: NDT and Evaluation

//玉兰厅(Yulan Hall)

Session chair: Luowei Cao (China Special Equipment Inspection and Research Institute, China)

13:30—13:50	Keynote lecture Manifold learning-assisted reconstruction of structural defects Qi Li, Dianzi Liu, Zhenghua Qian <i>University of East Anglia, UK</i>
13:50—14:10	Keynote lecture Quantitative non-destructive evaluation of thin film structures using optical coherence tomography and terahertz pulsed imaging Shuncong Zhong, Yaochun Shen <i>Fuzhou University, China</i>
14:10—14:25	A new ultrasonic thickness gauge for on-line monitoring of high temperature pipes Jiahe Song, Donghui Guo, JiuHong Jia, Shan-Tung Tu, Ning Liu <i>East China University of Science and Technology, China</i>
14:25—14:40	Research on acoustic emission monitoring and evaluation method of corrosion status of in-service high-risk pipe sections Shilin Xu, Jianping Gu, Yanbing Zhang, Xi Wang, Ying Zhang <i>Changzhou university, China</i>
14:40—14:55	Research on flow acoustic analogue monitoring experiment and early warning method for typical faults of FUCC Qianqian Shu, Feng Qiu, Zhanqian Chen, Yangli Pu, Ying Zhang <i>Changzhou University, China</i>
14:55—15:10	Experimental study on online damage early warning method for thick walled vessels based on acoustic characteristics Xueqin Wang, Feng Qiu, Ningwei Peng, Junyu Yao, Ying Zhang <i>Changzhou University, China</i>
15:10—15:25	Study on quantitative risk assessment method based on structural reliability in quality inspection of girth weld Mingfei Li, Chen Jian, Song Lin <i>Pipeline R&D Center, PipeChina North Pipeline Company, China</i>
15:25—16:00	Coffee break

Parallel session 19: Fluid-structure Interaction

//水仙厅(Shuixian Hall)

Session chair: Guo-Yan Zhou (East China University of Science and Technology, China)

13:30—13:50	Keynote lecture A two-way fluid-structure interaction method for the vibration research of heat exchanger tubes
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	Guorui Zhu, Chenghuo Zhao, Peng Ren, Wei Tan <i>Tianjin University, China</i>
13:50—14:05	Numerical simulation of thermal and hydraulic characteristics at the core outlet of SFR based on FSI method Yingjie Wang , Mingjun Wang, Wenxi Tian, Suizheng Qiu, Guanghui Su <i>Xi'an Jiaotong University, China</i>
14:05—14:20	Alternating forces in fully elastic spherical shell induced by a shear flow Jianfeng Zhou , Wenbo Liao, Chunlei Shao <i>Nanjing Tech University, China</i>
14:20—14:35	OpenFOAM simulation of damping controlled fluidelastic instability Zhipeng Feng <i>Nuclear Power Institute of China, China</i>
14:35—14:50	Theoretical research on acceleration and deceleration characteristics of a micro droplet of magnetic fluid driven by gradient magnetic field Liang Hao , Jiangfeng Zhou, Chunlei Shao <i>Nanjing Tech University, China</i>
14:50—15:05	Study on vortex shedding in water medium of three-way closed branch pipe Shuai Liu , WanYou Li, ZhiPeng Feng, FuRui Xiong, YiXiong Zhang, Xuan Huang, ZhongXiu Zeng, WenQi Zhang <i>Nuclear Power Institute of China, China</i>
15:05—15:20	Numerical study on thermal stress fluctuation caused by coaxial-jet flow for the lower head of central measurement column Zunquan Liu , Xueyao Xiong, Guo-Yan Zhou, Youpeng Pan, Weitong Zhou, Shan-Tung Tu <i>East China University of Science and Technology, China</i>
15:20—15:35	CFD investigation on thermal hydraulics of secondary side flow field of steam generator under non-standard operating conditions Xiong Guangming , Tan Wei, Long Teng <i>China Nuclear Power Design Company, LTD(Shenzhen), China</i>
15:35—16:00	Coffee break

Parallel session 20: Miniaturized Specimen Technique

//暹罗湾

(Xianluowan Hall)

Session chair: Kaishu Guan (East China University of Science and Technology, China)

13:30—13:50	Keynote lecture Damage assessment of structural materials by small sample testing technique Shin-ichi Komazaki <i>Kagoshima University, Japan</i>
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13:50—14:05	Methodology to evaluate mechanical properties of aging polyethylene pipes by miniaturized specimen technique Xingchen Dai , Yichang Huang, Kaishu Guan <i>East China University of Science and Technology, China</i>
14:05—14:20	A new experimental method to investigate the creep behavior of miniature specimens by bulging Jin Shi , Xin Liu, Jian-Feng Wen, Fakun Zhuang, Shan-Tung Tu <i>East China University of Science and Technology, China</i>
14:20—14:35	Experimental methods and local-domain-based micro-mechanics models of micro-sized specimen Hezong Li , Suxia Huang, Suxia Huang, Wei Sun <i>Hebei University of Engineering, China</i>
14:35—14:50	Evaluation of hydrogen embrittlement susceptibility of X65, X70 and A106 steels by small punch test Yingqiang Shan , Jiru Zhong, Qiongqi Wang, Kaishu Guan <i>East China University of Science and Technology, China</i>
14:50—15:05	Nanoindentation study on hydrogen-induced hardening performance of ferrite and austenite in 2205 duplex stainless steel Ping Tao , Chenyu Zhao, Jianming Gong <i>Nanjing Tech University, China</i>
15:05—15:20	Research on evaluating the tensile damage of typical steels for pressure vessel by spherical indentation tests Jianxun Li , Tairui Zhang, Weiqiang Wang <i>Shandong university, China</i>
15:20—16:00	Coffee break

Parallel session 21: International Workshop on Battery Safety and Reliability 3 //春晓厅(Chunxiao Hall)

Session chair: Xuning Feng (Tsinghua University, China)

13:30—13:55	Keynote lecture Detection of lithium plating in li-ion batteries: Recent progress and current challenges Dongsheng Ren , Tengting Shen, Xuebing Han, Xuning Feng, Languang Lu, Li Wang, Minggao Ouyang, Xiangming He <i>Tsinghua University, China</i>
13:55—14:20	Keynote lecture Semiconductor material design towards batteries and solar cells with improved stability Lianzhou Wang <i>The University of Queensland, Australia</i>
14:20—14:45	Keynote lecture

	Mechanical failure assessment of lithium ion battery electrode Xuanchen Zhu, Haofeng Chen , Weiling Luan <i>University of Strathclyde, UK</i>
14:45—15:05	Aging mechanisms of LiNi_{0.8}Co_{0.15}Al_{0.05}O₂/graphite battery after overcharging at low temperatures Pengfei Sun , Xiaoning Zhang, Yu Zhu, Shixue Wang <i>Tianjin University, China</i>
15:10—15:30	Influence of material properties of components on mechanical response of jellyroll in lithium-ion battery Tianqi Zhao , Yong Xia <i>Tsinghua University, China</i>
15:30—16:00	Coffee break

Student Paper Competition 2

//桂雨厅(Guiyu Hall)

Session chair: Jianming Gong (Nanjing Tech University, China)

13:30—13:50	Evaluation of multiaxial fatigue strength for high chromium steel under non-proportional loading in high cycle fatigue region Takaki Kojima , Satoru Maeda, Noritake Hiyoshi, Lei He, Takashi Nozawa, Takamoto Itoh <i>Ritsumeikan University, Japan</i>
13:50—14:10	Study on the ability of ultrasonic flaw detection of hollow axle's crack Ruiguo Yan , Wenjing Wang <i>Beijing Jiaotong University, China</i>
14:10—14:30	Micromechanical behavior of Ti-2Al-2.5Zr alloy under cyclic loading using crystal plasticity modeling Shengkun Wang , Gang Chen <i>Tianjin University, China</i>
14:30—14:50	Experimental testing of compressive ratcheting and creep of high density polyethylene (HDPE) Peishan Ding , Xiaotao Zheng, Yaonan Dai, Kaixuan Cheng, Lingfeng Pan <i>Wuhan Institute of Technology, China</i>
14:50—15:10	Non-equiaxial residual stress measurement by indentation energy difference method Wei Peng , Bin Yang, Wunchun Jiang, Guanghua Sun, Xiaoming Shao <i>China University of Petroleum(East China), China</i>
15:10—15:30	Low cycle fatigue properties of Selective Laser Melted 316L austenitic stainless steel at high temperature Yefeng Chen , Xiaowei Wang, Jianming Gong <i>Nanjing Tech University, China</i>
15:30—16:00	Coffee break

Parallel session 22: Fracture under Extreme Conditions

//水仙厅

(Shuixian Hall)

Session chair: Sujun Wu (Beihang University, China)

16:00—16:20	Keynote lecture Multiscale theories and applications: From microstructure design to macroscopic assessment Jiachao Ji, Shuhong Dong, Peishi Yu, Ning Wei, Junhua Zhao <i>Jiangnan University, China</i>
16:20—16:35	Multi-scale viscoelastic analysis of FRP strengthened concrete structures Guannan Wang, Rui Wu, Rongqiao Xu <i>Zhejiang University, China</i>
16:35—16:50	Comparisons of tensile property calculation models in spherical indentation test (SIT) for ferritic-austenitic stainless steel dissimilar metal welds (DMW) Tairui Zhang, Jianxun Li, Weiqiang Wang <i>Southeast University, China</i>
16:50—17:05	Analysis of local failure of pressure pipeline based on ASME strain controlled criterion Xin Liu, Liang Sun <i>China Special Equipment Inspection and Research Institute, China</i>
17:05—17:20	Leakage failure analysis of flue gas waste heat recovery device Lin Liang, Zi-qi Ren, Jin-shan Dong, Yi Ding <i>Nanjing Tech University, China</i>
17:20—17:35	Macroscopic characteristics of LPG cylinder burst under fire environment Liang Lin <i>China Special Equipment Inspection and Research Institute, China</i>
17:35—17:50	Fracture behaviors analysis of reactor pressure vessel under severe core melting accident Anyu Liao, Jian Zhu, Dasheng Wang, Fengping Zhong, Jichang Chen, Jianfeng Mao <i>Zhejiang University of Technology, China</i>
18:00—	Buffet for dinner

Parallel session 23: Creep Life Prediction

//花港厅(Huagang Hall)

Session chair: Weizhe Wang (Shanghai Jiao Tong University, China)

16:00—16:20	Keynote lecture Prediction of creep damage with the help of basic cavitation models Rolf Sandström <i>KTH Royal Institute of Technology, Sweden</i>
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16:20—16:35	Creep rupture limit assessment for the pressurized component under high-temperature condition Xiaoxiao Wang , Zhiyuan Ma, Haofeng Chen <i>University of Strathclyde, China</i>
16:35—16:50	Effect of niobium addition on the microstructure evolution of HR3C type heat resistant steel during aging Conghui Yang , Tieshan Cao, Jie Zhao <i>Dalian University of Technology, China</i>
16:50—17:05	Deformation and fracture mechanisms of the third-generation single crystal superalloy DD9 during the creep at elevated temperatures Ruida Xu , Ying Li, Huichen Yu <i>AECC Beijing Institute of Aeronautical Materials, China</i>
17:05—17:20	Study on the stress state of small punch test specimen with U type notch Jian Peng, Pei-Shuang Zhou , Hao Zhang, Xin-Ting Miao <i>Changzhou University, China</i>
17:20—17:35	High-temperature deformation behavior and fracture mechanisms of an advanced austenitic steel during pull-pull cycle load Dechao Lv , Tieshan Cao, Cong-qian Chen, Jie Zhao <i>Dalian University of Technology, China</i>
17:35—17:50	Thermomechanical and isothermal fatigue crack propagation behavior of 316LN austenitic stainless steel Yiming Zheng , Bingbing Li, Jingwei Zhao, Caiming Liu, Xu Chen <i>Tianjin University, China</i>
18:00—	Buffet for dinner

Parallel session 24: Design and Assessment Codes and Standards

//暹罗湾(Xianluowan Hall)

Session chair: Bingjun Gao (Hebei University of Technology, China)

16:00—16:20	Keynote lecture Common structural integrity approaches in corrosion fatigue in the carbon neutral energy era Kamran Nikbin <i>Imperial College London, UK</i>
16:20—16:40	Keynote lecture Direct methods on structural integrity: The transition from deterministic assessment to probabilistic analysis Xiaoxiao Wang, Zhiyuan Ma, Haofeng Chen <i>University of Strathclyde, UK</i>
16:40—16:55	A modification of J-Qm theory and out-of-plane crack-tip constraint quantification Miao Yi , Zhao Lei <i>Tianjin University, China</i>
16:55—17:10	Evolution and effect of residual stresses in welded joint on the fatigue life involving the cutting process

Oct 10, 2021

	Rui Zhan , Hang Liang, Dongpo Wang, Xiaohan Xu, Caiyan Deng <i>Tianjin University, China</i>
17:10—17:25	Thermodynamic coupling analysis of carbon-ceramic composite brake disc for next generation high-speed train Junsheng Qu , Wenjing Wang <i>Beijing Jiaotong University, China</i>
18:00—	Buffet for dinner

Parallel session 25: Additive Manufacturing

//龙井厅(Longjing Hall)

Session chair: Guiyi Wu (Centre of Excellence for Advanced Materials, China)

16:00—16:20	Keynote lecture High-reliability manufacture and repair of single-crystal hot section components from Ni-base superalloy powders: Trends, opportunities and challenges Bo Chen , Hui Peng <i>University of Leicester, UK</i>
16:20—16:35	Influence of corrosion on fracture toughness characteristics of low carbon WAAM components Anna Ermakova , Ali Mehmanparast <i>Cranfield University, UK</i>
16:35—16:50	Low cycle fatigue properties experiment and prediction of SLM Ti-6Al-4V alloy with different heat treatment methods Jiangjing Xi , Yun Hu, Jun Jiang, Hui Xing, Yuanfei Han, Kamran Nikbin <i>Imperial College, UK</i>
16:50—17:05	Additive manufacturing and modelling of CF/PA composite metamaterials Yuan Chen , Lin Ye <i>The University of Sydney, Australia</i>
17:05—17:20	A review of fatigue performance and life prediction for additive manufacturing metals Xiaofan Zhang , Yingyu Wang, Chengpeng Wang <i>Nanjing University of Aeronautics and Astronautics, China</i>
17:20—17:35	Experimental study on microstructure and mechanical properties of aero-engine thin blade by multi-layer laser-cladding repairment Chen Wei , Xiangfan Nie, Yuyuan Tang, Yinghong Li <i>Air Force Engineering University, China</i>
18:00—	Buffet for dinner

Parallel session 26: Artificial Intelligence and Big Data

//玉兰厅(Yulan Hall)

Session chair: Lanting Zhang (Shanghai Jiao Tong University, China)

16:00—16:20	Keynote lecture A data-driven approach to predicting the anisotropic mechanical behaviour of voided single crystals He-Jie Guo, Chao Ling, Esteban Busso , Chen-Feng Li, Dong-Feng Li <i>Harbin Institute of Technology-Shenzhen, China</i>
16:20—16:35	Evaluation of fatigue life and fatigue limit for structural materials AISI 316, AISI 4140 and CA6NM via machine learning approach Lei He , Zhi-Lei Wang, Hiroyuki Akebono, Atsushi Sugeta, Takamoto Itoh <i>Ritsumeikan University, Japan</i>
16:35—16:50	Machine-learning-based damage identification methods with features derived from double-window principal component analysis Ge Zhang , Liqun Tang, Zejia Liu, Licheng Zhou, Yiping Liu, Zhenyu Jiang <i>South China University of Technology, China</i>
16:50—17:05	Neural network-driven transient thermal stress evaluation based on images of thermal barrier coatings under CMAS penetration Luyuan Ning , Zhenwei Cai, Yingzheng Liu, Weizhe Wang <i>Shanghai Jiao Tong University, China</i>
17:05—17:20	Research on typical damage diagnosis and prediction model of pressure equipment based on data-driven Ru Li , Liangchao Chen, Luowei Cao <i>China Special Equipment Inspection and Research Institute, China</i>
17:20—17:35	Last stage blade life prediction of steam turbine based on fluid-solid interaction simulation and support vector machine algorithm Guodong Zhang, Lukuan Yang , Xianxi Xia, Minjin Tang, Jinhua Shi <i>Suzhou Nuclear Power Research Institute, China</i>
18:00—	Buffet for dinner

Parallel session 27: Residual Stress

//梅花厅(Meihua Hall)

Session chair: Wenchun Jiang (China University of Petroleum(East China), China)

16:00—16:20	Keynote lecture Stacking fault deformation in additively manufactured entropy alloys Wanchuck Woo <i>Korea Atomic Energy Research Institute, Korea</i>
16:20—16:40	Keynote lecture Integrated computation of welding residual stress and strain Hao Lu , Yi Zheng, Kejin Zhang, Junmei Chen <i>Shanghai Jiao Tong University, China</i>
16:40—16:55	Vibration fatigue evaluation procedure of welded structures in frequency domain Xianjun Pei , Pingsha Dong <i>University of Michigan, America</i>
16:55—17:10	Multi-scale analysis of residual stress in the selective laser melted Inconel 718 alloy

	Yu Wan , Wei Wen, Wenchun Jiang <i>China University of Petroleum (East China), China</i>
17:10—17:25	A method to control weld residual stress by the primary plus secondary local PWHT for ultra-large pressure vessels Qiang Jin , Wenchun Jiang <i>China University of Petroleum (East China), China</i>
17:25—17:40	Flat-conical indentation models to obtain residual stress and mechanical properties of materials Xiaokun Liu , Lixun Cai <i>Southwest Jiaotong University, China</i>
17:40—17:55	Residual stress relaxation of low-temperature gaseous carburized layer on austenitic stainless steel under fatigue loading: Experimental analysis and modelling Yawei Peng , Zhe Liu, Shuaihui Wang, Yajian Feng, Jianming Gong <i>Nanjing Tech University, China</i>
18:00—	Buffet for dinner

Parallel session 28: International Workshop on Battery Safety and Reliability 4 //春晓厅(Chunxiao Hall)

Session chair: Penglin He (China Electronics Standardization Institute, China)

16:00—16:20	Effects of metal ion contamination on performance of proton exchange membrane fuel cell Lifeng Xu , Jinzhu Tan, Qiong Hou, Jiaran Liu, Weizhan Yang <i>Nanjing Tech University, China</i>
16:20—16:40	Cyclic plastic behavior of LiNi0.8Co0.1Mn0.1O2 cathode for soft-pack lithium-ion batteries Ying Chen , Weiling Luan, Haofeng Chen, Shan-Tung Tu <i>East China University of Science and Technology, China</i>
18:00—	Buffet for dinner

Student Paper Competition 3

//桂雨厅(Guiyu Hall)

Session chair: Jianming Gong (Nanjing Tech University, China)

16:00—16:20	High density of mechanical incompatible interface-controlled high ductility in heterogeneous materials based on crystal plasticity Yong Zhang , Xian-Cheng Zhang, Yun-Fei Jia, Dong-Feng Li, Guang-Jian Yuan, Hao Chen, Shan-Tung Tu <i>East China University of Science and Technology, China</i>
16:20—16:40	Deformation mechanism of commercially pure titanium under biaxial loading at room and high temperatures Yuanjie Fu , Gang Chen <i>Tianjin University, China</i>

Oct 10, 2021

16:40—17:00	Heterogeneous microstructure of duplex stainless steel 2205 weld joints by electric resistance welding and its role on tensile and fatigue performance Zhilong Dong , Xuefang xie, Wenchun Jiang <i>China University of Petroleum(East China), China</i>
17:00—17:20	The effects of strain rates on the tensile and creep-fatigue properties of 316H stainless steel Zhouxin Pan , Yuxuan Song, Yuebing Li, Weiya Jin, Zengliang Gao <i>Zhejiang University of Technology, China</i>
18:00—	Buffet for dinner

Day 3: Detailed Program

Parallel session 29: Advanced Materials Modeling //梅花厅(Meihua Hall)

Session chair: Lixun Cai (Southwest Jiaotong University, China)

08:30—08:45	Tensile deformation behavior and fracture mechanism of fully austenitic gradient nanostructured 310S stainless steel Yonggang Wang , Zhenyu Ding, Xiaogui Wang, Zengliang Gao <i>Zhejiang University of Technology, China</i>
08:45—09:00	Multiscale modelling of zircaloy δ-hydride based on nanoindentation and dislocation density Xiaodong Zan, Xiang Guo <i>Tianjin University, China</i>
09:00—09:15	The relationship between impact energy and fracture toughness of SA508 steel based on crystalline plastic finite element Zhibo He , Chen Li, Yuebing Li, Yongcheng Xie, Zengliang Gao <i>Zhejiang University of Technology, China</i>
09:15—09:30	Differences in mechanical responses induced by grain boundary of bicrystal micropillars Yuan yuan Cui , Yunfei Jia, Fuzhen Xuan <i>East China University of Science and Technology, China</i>
09:30—09:45	Nonlinear impact damage evolution of charpy type and analysis of its key influencing factors Jiadong Yang , Jian Zhu, Dasheng Wang, Fengping Zhong, Jichang Chen, Jianfeng Mao <i>Zhejiang University of Technology, China</i>

Parallel session 30: Advanced Materials Testing //暹罗湾(Xianluowan Hall)

Session chair: Weiqiang Wang (Shandong University, China)

08:30—08:50	Microstructure, mechanical and corrosion properties of low-density high entropy alloy Al40Cu15V15Ti15Cr15 Ke Liu , Sujun Wu, Huichen Yu <i>Beijing Institute of Aeronautical Materials, China</i>
08:50—09:05	Effect of phase transformation on multiaxial creep behaviors of 16MND5 steel Jianfeng Mao, Jian Zhu , Fengping Zhong, Jichang Chen, Shiyi Bao, Dasheng Wang <i>Zhejiang University of Technology, China</i>

Oct 11, 2021

09:05—09:20	High temperature superelasticity realized in equiatomic Ti-Ni conventional shape memory alloy by severe cold rolling Jian Zhang , Tong Chen, Wei Li, Jozef Bednarcik, Ann-Christin Dippel <i>Jiangnan University, China</i>
09:20—09:35	In-situ magnetic permeability measurement of deformation-induced martensitic transformation in a TRIP steel under cyclic loadings Cheng Luo , Huang Yuan <i>Tsinghua University, China</i>
09:35—09:50	A small-scale test technology for low cycle fatigue properties Tianxiao Sui , Duoqi Shi, Yongsheng Fan, Jianan Song, Chaoshuo Yang, Xiaoguang Yang <i>Beihang University, China</i>

Parallel session 31: Fracture under Extreme Conditions

//龙井厅

(Longjing Hall)

Session chair: Rong Jiang (Nanjing University of Aeronautics and Astronautics, China)

08:30—08:50	Keynote lecture Application of strain-based fracture modeling to hydrogen embrittlement problems Ki-Wan Seo, Gyo-Geun Yoon, Jin-Ha Hwang, Yun-Jae Kim <i>Korea University, Korea</i>
08:50—09:05	A study on identification of parameters in Gurson–Tvergaard–Needleman model for ductile metals Tairui Zhang , Yinsheng Li <i>Japan Atomic Energy Agency, Japan</i>
09:05—09:20	Multi-size and multi-time scale analysis on structural mechanical responses of reactor pressure vessel under pressurized thermal shock Ding Zhou , Jiacheng Luo <i>Nuclear Power Institute of China, China</i>
09:20—09:35	Safety assessment of defects in the nozzle-head intersection of a nuclear steam generator Ruikai Zhang , Pan Liu, Yue Li, Dasheng Wang, Jianping Tan <i>East China University of Science and Technology, China</i>
09:35—09:50	Effect of microstructure on the electrochemical behavior of Alloy 600 at high-temperature pressurized water Zhengjie Zhao , Kaishu Guan <i>East China University of Science and Technology, China</i>
09:50—10:05	Failure analysis of a waste heat boiler Han Zhang , Ming Zhang, Mengli Li <i>Qilu University of Technology, China</i>

Parallel session 32: Fracture under Extreme Conditions

//花港厅

(Huagang Hall)

Session chair: Shuxin Li (Ningbo University, China)

08:30—08:45	Study on elastic buckling behavior of the thin plate with mixed mode I-II crack Qian Yin , Changyu Zhou, Xiaohua He <i>Nanjing Tech University, China</i>
08:45—09:00	Study on model I and I-II mixed model fatigue crack growth based on XFEM Fulei Wang , Xiaohua He, Changyu Zhou <i>Nanjing Tech University, China</i>
09:00—09:15	Fracture response of X80 steel pipe welded girth based on constraint-modified J-R curves Ziwei Li , Caiyan Deng, Baoming Gong, Yong Liu, Dongpo Wang <i>Tianjin University, China</i>
09:15—09:30	Local stability of thin-walled cylinder structure Yunling Dai , Yuebing Li, Bingbing Chen, Zengliang Gao, Weiya Jin <i>Zhejiang University of Technology, China</i>
09:30—09:45	Hydrogen permeation in mill/solution annealed Alloy 600 at room temperature and high-temperature pressurized water Farzin Arjmand , Zhengjie Zhao, Kaishu Guan <i>East China University of Science and Technology, China</i>
09:45—10:00	Crack initiation characteristics of brittle materials with I-II mixed mode crack under uniaxial compression Li-Zhu Jin , Chen-Yang Yu, Qi Pei, Le Chang, Chang-Yu Zhou <i>Nanjing Tech University, China</i>

Parallel session 33: Fatigue Crack Growth

//春晓厅(Chunxiao Hall)

Session chair: Zhe Zhang (Tianjin University, China)

08:30—08:45	Shielding effects on fatigue and crack growth property of the laser-induced recasting zone in a nickel-based superalloy Tinglian Zhang , Huang Yuan, Shun Yang <i>Tsinghua University, China</i>
08:45—09:100	Singular V-shape propagation trend, mechanism and segmented characterization of fatigue short crack Molin Su , Lianyong Xu, Lei Zhao <i>Tianjin university, China</i>
09:00—09:15	Prediction of variable amplitude fatigue crack growth life based on modified grey model Lin Zhang , Xiaohui Wei

Oct 11, 2021

Nanjing University of Aeronautics and Astronautics, China

09:15—09:30 **Numerical analysis method of crack propagation simulation considering small crack stage**
Zhifang Wang, Xiaoguang Yang, Yi Shi, Duoqi Shi
Beihang University, China

Parallel session 34: Additive Manufacturing

//玉兰厅(Yulan Hall)

Session chair: Guian Qian (Institute of Mechanics, Chinese Academy of Sciences, China)

08:30—08:50	Keynote lecture Fracture behaviour of additively manufactured IN718 in the presence of crack-like defects Guiyi Wu <i>Centre of Excellence for Advanced Materials, China</i>
08:50—09:05	Structural design and mechanical performance of 3D printed metal vascular stent Suxia Huang , Hezong Li, Wei Sun, Jingtao Miao, Zhiang Chen, Liguozhao <i>Hebei University of Engineering, China</i>
09:05—09:20	Extreme High-Speed Laser Material Deposition (EHLA) of Ni-base superalloy Yang Zhang , Lianyong Xu, Yongdian Han, Lei Zhao, Hongyang Jing <i>Tianjin University, China</i>
09:20—09:35	Application of hybrid additive manufacturing technology for performance improvement of martensitic stainless steel Wei Chen , Lianyong Xu, Yongdian Han <i>Tianjin University, China</i>
09:35—09:50	Experimental study on high temperature fatigue properties of Ti6Al4V alloy by selective laser melting Liangliang Wu , Zehui Jiao, Huichen Yu <i>Beijing Institute of Aeronautical Materials, China</i>

Parallel session 35: Structure Health and Integrity Monitoring //桂雨厅

(Guiyu Hall)

Session chair: Yun Tu (East China University of Science and Technology, China)

08:30—08:50	Keynote lecture Aircraft structural operational integrity-the comprehensive quality characteristic of aircraft structure Yuting He <i>Air Force Engineering University, China</i>
08:50—09:05	Application of digital image correlation technique to test of mechanical properties Yu Li , Yao Di, Luo Jiacheng

Oct 11, 2021

	<i>Nuclear Power institute of China, China</i>
09:05—09:20	A Reliable Metal-Packaged FBG Strain Sensor for Structural Health Monitoring of Equipment at Cryogenic Temperatures Ya-Li Wang , Zhi-Qiang Xu, Yun Tu, Shan-Tung Tu <i>East China University of Science and Technology</i>
09:20—09:35	Flow-induced vibration of parallel vertical vessels under different vortex structures Xiantao Fan , Wei Tan <i>Tianjin University, China</i>
09:35—09:50	High-precision adaptive strain sensor array via direct ink writing: Scalable circuit design and distribution-to-combination printing Peishi Yu , Lixin Qi, Zhiyang Guo, Junhua Zhao <i>Jiangnan University, China</i>
09:50—10:05	Real-time visible monitoring of crack growth behavior under biaxial loading through organic mechanoluminescence Hong Lin , Zhe Zhang, Gang Chen, Xu Chen <i>Tianjin University, China</i>

Closing Ceremony

//桂雨厅(Guiyu Hall)

Session chair: Zengliang Gao (Zhejiang University of Technology, China)

10:30	Best paper/poster awarding chaired by Jian-Feng Wen <i>East China University of Science and Technology, China</i>
10:50	Invited speech: A plea for entropy study George C. Sih <i>Lehigh University, USA</i>
11:00	Conference summary: structural integrity challenges in the context of carbon neutrality Shan-Tung Tu <i>East China University of Science and Technology, China</i>

A list of posters

Poster Q&A session (16:00—18:00, October 10)

- 1) (*Air Force Engineering University*) Qiuyu Chen, Qiang Wang, Jianguo Gao. Reliability analysis method of aircraft structure based on damage information and finite element simulation.
- 2) (*Changzhou University*) Zhan Chen, Ying Zhang. Gas jet noise detection and voice print recognition method.
- 3) (*China Nuclear Power Design Company Ltd*) Enming Liang. Using the nonlinear kinematic hardening material model of chaboche for elastic-plastic ratcheting analysis.
- 4) (*China University of Mining and Technology*) Limin Shen, Wei Liu, Yanfei Wang. Analysis on damage evolution and failure of HP40Nb alloy tubes resulting from compounded stress and geometric structure.
- 5) (*East China University of Science and Technology*) GZ Wang, Y Zheng, K Wang, FZ Xuan, ST Tu. Correlation of the Master Curve reference temperature T_0 with unified constraint parameter.
- 6) (*East China University of Science and Technology*) Haihua Xu, Weiling Luan, Senming Wu. Numerical analysis of thermal runaway propagation in lithium-ion batteries by combining liquid cooling and thermal spread blocking.
- 7) (*East China University of Science and Technology*) J.X. Zhao, G.Z. Wang, S.T. Tu, F.Z. Xuan. Correlation between ductile fracture toughness and unified constraint parameter for different materials.
- 8) (*East China University of Science and Technology*) Jin Shi, Fakun Zhuang, Zhenlong Hu, Luyang Geng, Shan-Tung Tu. Quantitative evaluation for sensitization of austenite stainless steel based on different electromagnetic test methods.
- 9) (*East China University of Science and Technology*) Jin Shi, Yonghua Gu, Fakun Zhuang, Liqiang Liu, Youjun Ye, Yining Wang, Shan-Tung Tu. Design of test device for creep behavior investigation at elevated temperature based on micro-disc bulging.
- 10) (*East China University of Science and Technology*) Ke Wang, Fuzhen Xuan, Shan-Tung Tu, Tingfeng Yan, Guozhen Wang. Limit loads of dissimilar metal welded joints for joining safe end to pipe-nozzle of nuclear pressure vessel.
- 11) (*East China University of Science and Technology*) Run-Zi Wang, Xian-Cheng Zhang, Shan-Tung Tu, Hideo Miura. Creep-fatigue life design and reliability analysis in high-temperature components.
- 12) (*East China University of Science and Technology*) Shiqi Hao, Ning Wang. Research on embrittlement hydrogen induced cracking of Cr-Mo Steel for hydrogen-contacting equipment.
- 13) (*East China University of Science and Technology*) Songyang Li, Weiling Luan, Chang Wang, ZiXian Zhuang. Bi-LSTM-GRU fusion structure based degradation prediction of proton exchange membrane fuel cell.
- 14) (*East China University of Science and Technology*) Xin Jin, Yang Shu, Jia-Wen Fei, Jian-Feng Wen. Creep fatigue crack initiation analysis of a modified 12% Cr steel based on crystal plasticity theory.

- 15) (*East China University of Science and Technology*) Xuening Zhang, Xiaobo Shen. Study on thermal stability and dehydrogenation kinetics of LiAlH_4 .
- 16) (*East China University of Science and Technology*) Zhaocheng Wu, Weiling Luan. H_2SO_4 -CTAB dual-modification of carbon black for PEMFCs Pt catalyst.
- 17) (*East China University of Science and Technology*) Zhi Luo, Shaoping Zhou, Qinfei Li, Yong Li. A sensitivity analysis on the corrosion detection capability of multimodal guided waves for metallic pressure vessels based on discontinuous Galerkin method.
- 18) (*East China University of Science and Technology*) Zhi-Wei Hou, Xiang-Fan Nie, Jian-Feng Wen, Xian-Cheng Zhang, Shan-Tung Tu. Effect of laser shock peening on high cycle fatigue crack behavior of a titanium alloy.
- 19) (*Hefei General Machinery Research Institute Co., Ltd*) Renchao Wei, Jie Dong, Jiyan Wang, Yufei Zhang. Probabilistic fatigue damage accumulation analysis of top tensioned risers under the combined action of wave, flow and platform random excitation.
- 20) (*Jiangsu Province Special Equipment Supervision Institute*) Wei Ye, Gaofeng Song. Research on Intelligent Inspection Method of Cracked Pressure Vessel Based on Digital Twinning.
- 21) (*Jiangsu University of Technology*) Jueheng He, Qiao Dai, Qile Bao. Cyclic plastic deformation at fatigue crack tip of commercial pure titanium TA2.
- 22) (*Nanjing Tech University*) Jiadong Huang, Ye Chen. Structural analysis of the testing section of an accelerated-life testing device for high-temperature and high-pressure sealing gaskets.
- 23) (*Nanjing Tech University*) Jianqun Tang, Jianming Gong. Failure analysis of the pipeline manufactured by 304H austenitic stainless steel.
- 24) (*Nanjing Tech University*) Qiong Hou, Jinzhu Tan. Effects of composite reinforcing filler, Vulcanizing Temperature and Pressure on Mechanical Properties of Gasket Material for PEMFC.
- 25) (*Nanjing Tech University*) Wei Xia, Jinzhu Tan, Gang Liang, Jiaran Liu, Weizhan Yang. Numerical simulation of oil vapor evaporation and diffusion in loading oil into external floating-roof tank.
- 26) (*Nanjing University of Aeronautics and Astronautics*) Wenxuan Wang, Yingyu Wang. A virtual strain energy density method to assess multiaxial fatigue life for selective laser melting 316L low carbon steel.
- 27) (*Ningbo Special Equipment Inspection and Research Institute*) Shengjie Qian. Research on T-shaped fillet weld testing and application by using fully focused phased array technique.
- 28) (*PipeChina North Pipeline Company*) Jian Chen, Ting Wang, Fuxiang Wang, Hui Yang. Full-scale experimental study on X80 pipeline girth weld defect under combined loading.
- 29) (*Shanghai Research Institute of Chemical Industry Co., Ltd.*) Honghui Wang, Zeqin Wu, Weiye Wang, Deren Chu, Xiaobo Shen. Thermal behavior of lithium titanate batteries under slight over-discharging condition.
- 30) (*Special Equipment Safety Supervision Inspection Institute of Jiangsu Province*) Bu-Mei Wang, Yi-Ning Wang, Jin Wang, Mei-Ling Fang, Lin-Jian Dong, Chao-Ran Wang. Failure analysis of scrubber leakage in catalyst regeneration system of continuous reforming unit.
- 31) (*Su Zhou Nuclear Power Institute Co., Ltd*) Dun-Gui Zuo, Zhong-Wei Zhang, Yun-Ting Lai, Guo-Dong Zhang.

Research on Failure Mechanism of Tin-based Babbitt Alloy for Thrust Bearing.

- 32) (*Taishan Nuclear Power Joint Venture Co., Ltd.*) Shuang Qi, Wenxin Xiang, Lixun Cai, Xiaokun Liu, Fangmao Ning, Weiwei Yu, Jinhua Shi. The research of uniaxial stress-strain relationship by flat indentation method for a dissimilar metal weld joint.
- 33) (*Tianjin University*) Caiming Liu, Bingbing Li, Yiming Zheng, Xu Chen. Ratcheting fatigue behavior and life prediction of full-scale internal pressurized elbow under in-plane cyclic loading.
- 34) (*University of Electronic Science and Technology of China*) Xiao-Peng Niu, Shun-Peng Zhu, Jin-Chao He, Yang Ai, Kaikai Shi, Liping Zhang. Fatigue reliability design and assessment of RPV structures.
- 35) (*Xi'an Jiaotong University*) Weichang Guo, Fei Shen, Xiaogang Han. In-situ observation of Li dendrites behavior inside garnet-type solid state electrolyte Li₇La₃Zr₂O₁₂.
- 36) (*Xi'an Jiaotong University*) Yuting Yin, Kaiming Wang, Fei Shen, Xiaogang Han. Failure mechanisms and a multifunctional strategy of lithium metal anode using polyethylene separator at various temperatures.
- 37) (*Xi'an Jiaotong University*) Xianghua Chen. An electro-mechanical coupling damage evolution model and reliability analysis method for piezoelectric materials.
- 38) (*Zhejiang Academy of Special Equipment Science*) Jichang Chen, Liuyi Huang, Fengping Zhong, Dongyue Cheng. Crack propagation of Inconel 718 alloy by In-situ SEM/EBSD method.
- 39) (*Zhejiang University of Technology*) Jianfeng Mao. Numerical analysis on strength and fatigue of bolt structure of typical pressure equipment.
- 40) (*Zhejiang University of Technology*) Pengfei Wang, Sanlong Zheng, Bingbing Chen, Qiwen Zhou, Chao Du. Research on fatigue damage characterization of compressor blade steel FV520B based on nonlinear lamb waves.
- 41) (*Zhengzhou University*) Ke Wang. New theoretical approach for characterizing the creep properties in materials at any temperature.
- 42) (*Zhengzhou University*) Weijie Chen, Lu Zhang, Ke Wang. High Quality Development of Henan's equipment manufacturing industry in the context of Reliability-centered Manufacturing (RcM).

Hotel Information 酒店信息

Zhejiang Hotel, 278 Santaishan Road, Xihu District

浙江宾馆 西湖区三台山路 278 号

Liutong Hotel, 149 Santaishan Road, Xihu District

六通宾馆 西湖区三台山路 149 号

Distance between two hotels: 1 km for 15-minute walking or 3-minute driving

酒店之间路程约 1 公里，步行约 15 分钟；驾车 3 分钟即可

Check-out time: 14: 00

酒店退房时间 14: 00



Zhejiang Hotel Map 浙江宾馆平面图



Traffic Information 交通信息

Hangzhou East Railway Station-Zhejiang Hotel (14 km)

杭州东站(高铁站)—浙江宾馆(约 14 公里):

(1) Taxi: 50 RMB, 50 minutes

乘坐出租车约 50 元。行驶时间约 50 分钟。

(2) Subway Line 1 (Xianghu Direction), Fengqi station — Bus 27 (Tea Museum Direction), Shuangfeng Station—Zhejiang Hotel, 1 hour

地铁 1 号线（湘湖方向）在凤起路站下车，乘坐 27 路（茶博龙井馆区方向）在双峰站下车，步行到达浙江宾馆，全程约 1 小时。

Hangzhou Xiaoshan International Airport-Zhejiang Hotel (38 km)

杭州萧山机场—浙江宾馆（约 38 公里）:

Taxi: 150 RMB, 1 hour

乘坐出租车约 150 元，行驶时间约 1 小时。

Schedule of ISSI2021

Day	Time	Event
Oct 8	10:00—22:00	Registration
	15:00—17:00	Seminar (invitation based)
Oct 9	08:30—08:45	Conference opening
	08:45—12:00	Series sessions
	12:00—	Lunch
	14:00—18:00	Series sessions
	18:30—	Conference dinner
Oct 10	08:30—12:20	Panel discussions & Parallel sessions
	12:20—	Lunch
	13:30—17:50	Parallel sessions & Student paper competition
	16:00—18:30	Poster Q&A session
	18:30—	Buffet for dinner
Oct 11	08:30—10:00	Parallel sessions
	10:30—11:30	Closing ceremony
	Afternoon	Technical visiting (some participants only)
End		

