ICET
ELECTRONICS
TECHNOLOGY

2021 IEEE 4th International Conference on Electronics Technology

2021 年第四届 IEEE 电子技术国际会议

2021

7-10 May 2021 | Chengdu, China

2021 年 5 月 7-10 日 | 中国成都

西藏饭店
TIBET HOTEL CHENGDU
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藏文化主题酒店

North Renmin Road, Chengdu, Sichuan, China

四川省成都市金牛区人民北路一段 10 号

About IEEE ICET

2021 IEEE 4th International Conference on Electronics Technology (IEEE ICET) is organized by Sichuan Institute of Electronics, sponsored by IEEE, also with the support of University of Electronic Science and Technology of China, Sichuan University, Southwest Jiaotong University and Singapore Institute of Electronics. It is yearly held in Chengdu, China. The purpose of the conference is to provide an international platform for information exchange for senior and young researchers in the electronic industries. This conference has a rich schedule, which will include keynote speeches, invited speeches, poster presentations, oral presentations, online oral presentations, and academic visits, providing a relaxing and multicultural conference atmosphere for experts and scholars.

2021 年第四届 IEEE 电子技术国际会议由四川省电子学会和 IEEE 联合举办，并获得电子科技大学、四川大学、西南交通大学，以及新加坡电子学会的大力支持。ICET 每年在成都举办，会议旨在为学术研究界和电子工业界的资深研究者和青年研究者提供一个信息交流的国际平台。本次会议日程丰富，将包含大会报告、邀请报告、海报展示、口头报告展示、线上口头报告以及学术参观等形式，为广大专家学者提供一个轻松、多文化的会议氛围。

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Break 12:00-14:00	Academic Visit 13:00-16:00	Lunch 12:00-13:30	Lunch 12:20-13:30	Online Session 6-10 13:30-15:45
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		Poster Session 14:50-15:50	Invited Speech 15 Session 9-13 16:20-18:20	
		Best Paper Competitions 15:50-17:50	Dinner 18:20-20:30	
		Gala Dinner Awards Ceremony 18:00-20:30		

2021 IEEE 4th International Conference on Electronics Technology (ICET) will be held in Chengdu, China during May 7-10, 2021. IEEE ICET is an annual conference, and it brings a wide range of state-of-the-art research works from different aspects. It provides a forum for multidisciplinary discussion with the aim of combining the research ideas in various aspects of electronics technology. The primary objective of the meeting is to exchange research ideas, methodologies, techniques and applications for fosters their integration and future collaboration in various smart applications.

Under this special pandemic situation, IEEE ICET 2021 is held with hybrid online and offline. We totally have 1 workshop, 13 offline parallel sessions, 15 online parallel sessions, 6 Best Student Paper Competition sessions, as well as a poster exhibition. The conference set below awards as encouragement:

This year, IEEE ICET 2021 is highlighted with 11 tracks:

Track 1: Antennas and Microwaves

Track 2: Electronics Materials and Devices

Track 3: Communication and Networks

Track 4: Power and Electrical Engineering

Track 5: Aerospace & Electronics Systems

Track 6: Electronics Applications

Track 7: Internet of Things

Track 8: Embedded System

Track 9: AI and Applications

Track 10: Control and Robotics

Track 11: Signal Processing

Five Keynote Speakers:

Prof. ZhiNing Chen, National University of Singapore (IEEE Fellow, Fellow of Academy of Engineering, Singapore)

Prof. Xinzhou Dong, Tsinghua University, China (IEEE Fellow, IET Fellow)

Prof. Yuhua Cheng, Peking University, China (IEEE Fellow)

Prof. Vladimir Terzija, Skolkovo Institute of Science and Technology, Russia (IEEE Fellow)

Prof. Tao Li, Xi`an University of Posts & Telecommunications, China

And a number of Invited Speakers from different research fields. Special appreciation delivered by the conference for their great support. Apart from that, we'd like to extend our thanks to reviewers, for their great contributions on management of paper reviewing, to all of the sponsoring organizations for providing their generous support and to all of the conference participants for their contributions which are the foundation of this conference. We truly believe the participants will find the discussion fruitful and will enjoy the opportunity for setting up future collaborations.

Conference Chairs

Prof. Yuan Lin, University of Electronic Science and Technology of China

Prof. Shiwen Yang, University of Electronic Science and Technology of China

Prof. Vladimir Terzija, Skolkovo Institute of Science and Technology, Russia

Advisory Chair

Prof. Andrea Massa, University of Trento, Italy

Conference Chairs

Prof. Yuan Lin
University of Electronic Science and Technology of China

Prof. Shiwen Yang
University of Electronic Science and Technology of China

Prof. Vladimir Terzija
Skolkovo Institute of Science and Technology, Russia

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Hongbo Zhang, China
Hafiz Abd ul Muqeet, Pakistan
He Lv, China
Hao Wu, China

J
Janelli M. Mendez, Philippines
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Jianbin Gao, China

Jiang Wu, China
Jiangtao Huangfu, China
Jianhong Zhang, China
Jianhong Zhou, China
Jianjun Yang, USA
Jin Xu, China
Jun Wu, China
Jie Liu, China

K
Kaili Zhou, China

L
Li Xiang, China
Lixun Li, China

M
Maode Ma, Singapore
Min Bao, China

N
Niu Libin, China
Niansong Mei, China

P
Pei-Song Chee, Malaysia

Q
Qun Wei, South Korea
Qing Shen, China
Qian Bi, China
Qingguang Yu, China

R
Rustam Asnawi, Indonesia
Ruixue Yin, China

S
Shiwen Lei, China

T
Tiedong Cheng, China
Toempong Phetchakul, Thailand
Tao Zhang, China
Tailin Han, China
Tong Chen, China

W
Weihao Hu, China
Weipeng Cao, China
Wensheng Guo, China
Xingkui Mao, China

X
Xiang Liu, China
Xiongzhu Bu, China
Xi Wang, China

Y
Yanjun Fu, China
Yiying Zhao, China
Yong Luo, China
Yu Lu, China
Yuanfu Zhao, China
Yue Ming Ding, Norway
Yongbo Liao, China
Yuehai Wang,, China
Yuan Zhang, China
Yong-Hong Lee, Malaysia
Yu Xiao, China
Yuqian Yang, China
Yi Luo, China

Z
Zhang Weiping, China
Zhaojun Zhu, China
Zhiwei Li, China
Zhou Hang, China
Zhaojun Zhu, China
Zhou Liqiu, China
Zhaofeng Zhang, China
Zhikuang Cai, China
Zhiqin Qian, China
Zhenghuan Xia, China
Zhi Tao, China
Zheng Wang, China
Zhenghao Ge, China
Zhiqi Gao, China
Zishu He, China
Zhaofeng Zhang, China

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Day 1
May 5 | Wednesday
5 月 5 日|星期三

	Test for Online Sessions 线上分会报告前测试	
Time	**Event**	**Room**
10:00-12:00	Test for Session 1, 2, 3, 4	**ZOOM-Room 1** 962 0004 2779
	Test for Session 5, 6, 7, 8	**ZOOM-Room 2** 939 0496 5337
12:00-14:00	Break	
14:00-16:00	Test for Session 9, 10, 11, 12	**ZOOM-Room 1** 962 0004 2779
	Test for Session 13, 14, 15	**ZOOM-Room 2** 939 0496 5337
14:00-16:00	Test for Online Keynote Speakers & Session Chairs	**ZOOM-Room 3** 924 5394 8365

Day 2
May 7 | Friday
5 月 7 日|星期五

	Onsite Registration 线下会议签到、学术参观	
Time	**Event**	**Venue**
10:00-17:00	Sign Up & Materials Collection	**Hotel Lobby** 酒店大堂
13:00-16:00	Academic Visit- Electronic Science and Technology Museum	**UESTC** 电子科技博物馆

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Day 3
May 8 | Saturday
5 月 8 日|星期六

	Opening Ceremony, Keynote Speeches Best Paper Competitions & Poster Session 开幕式、主旨报告、优秀论文竞赛与海报展示	
Time	**Event**	**Venue**
9:00-9:05	**Welcome Address** Houwen Liu Executive Vice Chairman, Sichuan Institute of Electronics, China	**Host:** **Letian Huang,** **UESTC, China**
9:05-9:10	**Opening Remarks** Prof. Yuan Lin University of Electronic Science and Technology of China	Himalaya Hall 喜马拉雅厅 ｜17F & ZOOM-Room 3: 924 5394 8365
9:10-9:50	**Keynote Speech 1** *Design of Integrated Circuit and System for the Applications of Smart and Portable Medical Instruments* Prof. Yuhua Cheng, Peking University, China	
9:50-10:30	**Keynote Speech 2** *Feeder Automation System Based on Advanced Protective Relaying Technology* Prof. Xinzhou Dong, Tsinghua University, China	
10:30-11:20	**Group Photo & Coffee Break**	
11:20-12:00	**Keynote Speech 3** *From Rendering Engine to AI Engine, Perspective from Industry* Prof. Tao Li, Xi`an University of Posts & Telecommunications, China	
12:00-13:30	**Lunch**	Café 咖啡厅|2F

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zoom **13:30-14:10**	**Online Keynote Speech 1** *Update of Microwave Metalens Antennas* **Prof. Zhi Ning Chen, National University of Singapore**		**ZOOM-Room 3:** **924 5394 8365** **&** **Himalaya Hall** **喜马拉雅厅| 17F**
zoom **14:10-14:50**	**Online Keynote Speech 2** *Advanced Monitoring and Control of Future Power Systems* **Prof. Vladimir Terzija, Skolkovo Institute of Science and Technology, Russia**		
14:50-15:50	**Coffee Break & Poster Presentation**		

15:50-17:50	**Best Paper Competition 1**	**Best Paper Competition 2**	**Best Paper Competition 3**	**Best Paper Competition 4**
	Himalaya Hall A **喜马拉雅厅 A | 17F**	**Himalaya Hall B** **喜马拉雅厅 B | 17F**	**Manasarovar Room** **玛旁雍措厅 | 2F**	**Namtso Room** **纳木错厅 | 2F**

zoom **15:50-17:10**	**Best Paper Competition 5**	**Best Paper Competition 6**
	ZOOM-Room 5 (923 7511 8349) & **Yaamdrok Room 羊卓雍措厅 | 2F**	**ZOOM-Room 2** **939 0496 5337**

18:00-20:30	**Gala Dinner &** **Awards Ceremony**	**Summer Hall**

Day 4
May 9 | Sunday
5 月 9 日|星期日

Time	Event				
	Onsite Invited Speeches & Oral Presentations 线下邀请报告与分会报告				
	Workshop	**Session 1**	**Session 2**	**Session 3**	
9:00-12:20	Invited Speech 1-7	Invited Speech 8-10 & Oral Presentations	Invited Speech 11 & Oral Presentations	Oral Presentations	
	Red Mountain Hall 红山厅	17F	**Manasarovar Room** 玛旁雍措厅	2F	**Namtso Room** 纳木错厅	2F	**Yaamdrok Room** 羊卓雍措厅	2F	
12:20-13:30	Lunch				**Café** 咖啡厅	2F
	Session 4	**Session 5**	**Session 6**	**Session 7**	**Session 8**
13:30-15:55	Invited Speech 12, 13 & Oral Presentations	Invited Speech 14 & Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations
	Red Mountain Hall 红山厅	17F	**Himalaya Hall B** 喜马拉雅厅 B	17F	**Namtso Room** 纳木错厅	2F	**Yaamdrok Room** 羊卓雍措厅	2F	**Manasarovar Room** 玛旁雍措厅	2F
15:55-16:20	Coffee Break				
	Session 9	**Session 10**	**Session 11**	**Session 12**	**Session 13**
16:20-18:20	Invited Speech 15 & Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations
	Red Mountain Hall 红山厅	17F	**Himalaya Hall B** 喜马拉雅厅 B	17F	**Namtso Room** 纳木错厅	2F	**Yaamdrok Room** 羊卓雍措厅	2F	**Manasarovar Room** 玛旁雍措厅	2F
18:20-20:30	Dinner				**Café** 咖啡厅|2F

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Day 5
May 10 | Monday
5 月 10 日|星期一

Time	Event				
	Online Oral Presentations 线上分会报告				
	Session 1	Session 2	Session 3	Session 4	Session 5
ZOOM 9:30-12:00	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations
	ZOOM-Room 1 962 0004 2779	ZOOM-Room 2 939 0496 5337	ZOOM-Room 3 924 5394 8365	ZOOM-Room 4 930 6013 9870	ZOOM-Room 5 923 7511 8349
	Session 6	Session 7	Session 8	Session 9	Session 10
ZOOM 13:30-15:45	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations
	ZOOM-Room 1 962 0004 2779	ZOOM-Room 2 939 0496 5337	ZOOM-Room 3 924 5394 8365	ZOOM-Room 4 930 6013 9870	ZOOM-Room 5 923 7511 8349
	Session 11	Session 12	Session 13	Session 14	Session 15
ZOOM 16:15-18:30	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations	Oral Presentations
	ZOOM-Room 1 962 0004 2779	ZOOM-Room 2 939 0496 5337	ZOOM-Room 3 924 5394 8365	ZOOM-Room 4 930 6013 9870	ZOOM-Room 5 923 7511 8349

IEEE ICET

North Renmin Road, Chengdu, Sichuan, China
四川省成都市金牛区人民北路一段 10 号

Reservation Tel: 139 8222 9918 | Room Rate: 450RMB/night (breakfast included)
订房电话: 139 8222 9918 | 酒店协议价： 450 元含早

◆ **From Shuangliu Airport |从机场出发**
By Metro (Around 50 mins): Line 10→Taipingyuan Station (transfer to Line 3)→ Chengdu Provincial Gymnasium Station (transfer to Line 1)→People's North Road Station (Exit B)→200m Walk
地铁（大约 50 分钟）：10 号线→太平园站（转 3 号线）→省体育馆（转 1 号线）→人民北路，B 口出，步行 200 米。
By Taxi (Around 50 mins): Around RMB70 fare needed
出租车（大约 40 分钟）：费用大约 70 元

◆ **From Chengdu North Railway Station |从火车北站出发**
By Metro: Line 1→People's North Road Station→200mWalk （Around 10 mins needed）
地铁：1 号线（开往科学城方向）→人民北站，B 口出，步行 200 米，用时 10 分钟左右
By Taxi (Around 8 mins): Around RMB10 fare needed
出租（大约 8 分钟）：费用大约 10 元

◆ **From Chengdu East Railway Station |从成都东站出发**
By Metro: Line 2→Tianfu Square (transfer to Line 1) →People's North Road Station→200mWalk （Around 40 mins needed）
地铁：2 号线→天府广场（转 1 号线）→人民北路，B 口出，步行 200 米。用时 40 分钟左右。
By Taxi (Around 30 mins): around RMB30 fare needed
出租车（大约 30 分钟）：费用大约 30 元

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Oral Presentation | 口头报告

- Timing: a maximum of 15 minutes in total, including 2 minutes for Q&A. Please make sure your presentation is well timed.
- All oral session rooms are equipped with data projectors with a standard VGA connector. The speakers could also bring and use their own laptops or other presentation devices. Please check the compatibility of your laptop and the project before the session starts.
- Videos: If your Power Point files contain videos please make sure that they are well formatted and connected to the main files.

Poster Presentation | 海报展示

- Poster size is 60cm x 80cm
- Posters are required to be condensed and attractive.

Dress Code | 着装规范

Please wear formal clothes or national characteristics of clothing.

Important Notes | 注意事项

- Please take care of your belongings during the conference. The conference organizer does not assume any responsibility for the loss of personal belongings of the participants.
  会议期间请务必随身携带贵重物品，会议不对任何物品丢失负责。
- Please wear your participation badge during the conference. There will be NO access for people without a badge. NEVER discard your badge at will.
  会议期间进入所有会场请佩戴代表证。请不要随意丢弃代表证。
- Accommodation is not provided. Delegates are suggested make early reservation.
  参会者请提前自行预订酒店房间。
- For epidemic prevention and control, please wear a mask during the conference.
  为防控新冠疫情，请在会场佩戴口罩。
- Please show the badge and meal coupons when dining.
  就餐时请同时出示代表证与餐券。

Platform | 线上会议平台

ZOOM, Download link:
- https://zoom.us/download
- https://zoom.com.cn/download (for Chinese authors)

Meeting Rooms | 线上会议房间号

Room 1: Meeting ID-962 0004 2779, https://zoom.com.cn/j/96200042779
Room 2: Meeting ID-939 0496 5337, https://zoom.com.cn/j/93904965337
Room 3: Meeting ID-924 5394 8365, https://zoom.com.cn/j/92453948365
Room 4: Meeting ID-930 6013 9870, https://zoom.com.cn/j/93060139870
Room 5: Meeting ID-923 7511 8349, https://zoom.com.cn/j/92375118349

Online Meeting Needs | 线上会议需求

- A computer with internet connection and camera
- Headphone/earphone
- A quiet place
- Stable internet connection
- Proper lighting and background

Test Your Presentation | 线上报告测试

Date: May 5, 2021
Prior to the formal meeting, online presenters shall join the test room to ensure everything is on the right track. Please check the test time on page 8.
5 月 5 日为线上作者报告测试日，为保证一切进行顺利，请准时参加，具体时间请参考第 8 页。（线下报告者无需参加。）

Presentation Time | 报告时长

A maximum of 15 minutes in total, including Q&A. Please make sure your presentation is well timed.