#### 2018国际生物医学信息感知与微系统大会

# 2018 International Conference of Biomedical Information Perception & Microsystems (ICBIPM 2018)

June 13-15, 2018 Chengdu, China

**Conference Hotel:** Holiday Inn Chengdu High-Tech Center (No.1 Xixin Avenue, West Hi-Tech Development Zone, Chengdu, Sichuan, P.R. China 611731)

会议酒店:成都新希望高新中心假日酒店(成都高新西区西芯大道1号附1号)

**Conference Venue:** University of Electronic Science and Technology of China (UESTC), Qingshuihe Campus (No.2006, Xiyuan Ave.West Hi-Tech. Zone, Chengdu, Sichuan, P.R. China 611731)

会议地址:电子科技大学清水河校区(成都市高新西区西源大道2006号)

**Room A:** Auditorium, Electronic Science and Technology Research Institute, UESTC, Qingshuihe Campus

会议室A:电子科技大学清水河校区,电科院报告厅

**Room B:** Room 401, Zonghe Building, UESTC, Qingshuihe Campus

会议室B: 电子科技大学清水河校区, 综合楼401

**Room C:** Room 309, Zonghe Building, UESTC, Qingshuihe Campus

会议室C: 电子科技大学清水河校区, 综合楼309

### **ICBIPM2018 Conference Program**

	Day 1, Tuesday, Ju	ne 12, 2018	
14:00-22:00	Arrival & Registration	Hotel Lobby	
	Dinner (Small Hot Pot)	Brezz Cafe(1F)	Holiday Inn
18:30-21:30	晚餐(自助小火锅)		
	Day 2, Wednesday, J	fune 13, 2018	
8:30	School Shuttle (From Hotel to UESTC)	Holiday Inn Parking lot 酒店停车场(一楼大堂外)	Holiday Inn
	Opening Ceremony	Host: Jinhong Guo(郭劲宏)	
9:00-9:30	Welcome Speech by Conference Organizer	Speaker:***	1
	Welcome Speech by Conference Chair	Speaker: Yuejun Kang (康跃军)	
	Keynote Speech	nes	
Main Forum	Chair: Dongqing Li(李	<b>⊵冬青</b> )	Room A:
9:30-10:10	Dongqing Li (李冬青) University of Waterloo, Waterloo, Canada Electrokinetic Microfluidics, Nanofluidics and Lab-on-Chip Devices	Host: Yuejun Kang (康跃军)	
10:10-10:40	Coffee Break & Group	) Photo	Auditorium, ESTI, UESTC
10:40-11:20 11:20-12:00	Jongyoon Han  Massachusetts Institute of Technology, Cambridge, USA  Ion Selective Membrane (ISM) Microsystems for Biomedical Applications  Xingyu Jiang (蒋兴宇) National Center for NanoScience and Technology, University of Chinese Academy of Sciences, Beijing, China Microfluidics for Tomorrow's Medicine	- Host: Jianping Fu (傅剑平)	会议室 A: 电子科技大学电科 院报告厅
12:00-14:00	Lunch	Furong Restaurant 芙蓉餐厅	UESTC
14:00-14:40	Jianping Fu (傅剑平) University of Michigan, Ann Arbor, USA Synthetic Human Embryology in a Dish		
14:40-15:20	Rong Fan (樊荣) Yale University, New Haven, USA BioMEMS Tools for Single-cell Functional Omics and the Monitoring of Cancer Immunotherapy	Host: Xingyu Jiang(蒋兴宇)	Room A: Auditorium, ESTI, UESTC 会议室 A: 电子科技大学电科
15:20-15:40	Coffee Break	1	院报告厅
15:40-16:20	Zuankai Wang (王钻开) City University of Hong Kong, Hong Kong, China	Host: Rong Fan(樊荣)	

	Calf manufled Duonlata for Dional dis-1		
	Self-propelled Droplets for Biomedical		
	Applications		
	Yonggang Wen(文勇刚)		
	Nanyang Technological University, Singapore		
16:20-17:00	Performance Optimization for Distributed		
	Machine-Learning Applications at Scale:A		
	Swiss-Army-Knife Approach		
17:00-17:40	Poster Presentation & Compan	ies Exhibitions	
18:00-19:00	Dinner	Furong Restaurant 芙蓉餐厅	UESTC
19:00	School Shuttle (From UEST	C to Hotel)	
	Day 3, Thursday, Ju	me 14, 2018	
8:30	School Shuttle (From Hotel to UESTC)	Holiday Inn Parking lot 酒店停车场(一楼大堂外)	Holiday Inn
Main Farmer	Keynote Speech	es	
Main Forum	Chair: Dongqing Li(李	:冬青)	
	Yuan-Ting Zhang(张元亭)		
	City University of Hong Kong, Hong Kong,		
	China		
9:00-9:40	Health Engineering: Wearable "MINDS" for		
	the Early Prediction of Cardiovascular		Room A:
	Diseases	Host: Yuejun Kang (康跃军)	Auditorium, ESTI,
	Leslie Y. Yeo		UESTC
	RMIT University, Melbourne, Australia		会议室 A:
9:40-10:20	Plug-and-Actuate On Demand: Multimodal		电子科技大学清水
9.40-10.20			河校区电科院报告
	Modular Individual Addressability of Microarray Plates		厅
10:20-10:40	Coffee Break		
10:20-10:40			
	Nam-Trung Nguyen		
10:40-11:20	Griffith University, Brisbane, Australia	Host: Zuankai Wang(王钻开)	
	Liquid marble based digital microfluidics:		
	fundamental physics and applications		
11:20-12:00	Campus Tour	Furong Postovront	UESTC
12:00-14:00	Lunch Sala Farmer	Furong Restaurant 芙蓉餐厅	
	Sub-Forum		
	Sub-Forum 1	Room A:	
	"Electronic Information &Biomedicine"	The Auditorium, ESTI, UESTC	
	Outstanding Talent Forum	会议室 A:	
	"电子信息+生物医学"杰出人才论坛	电子科技大学清水河校区电科院:	报告厅
14:00-17:30	Sub-Forum 2	Room B: Room 401, Zongh	e Building, UESTC,
	Biomedical Materials and Micro-nano Devices	Qingshuihe Campus	
	Forum	会议室 B: 电子科技大学清水河	校区. 综合楼 401
	生物医用材料与微纳米器件论坛	スペエ~・も 1 円以八丁用小門	ハニ, 小口区 <sup>101</sup>

	Biomedical Systems and Artificial	Qingshuihe Campus	
	Intelligence(AI) Forum	会议室 C: 电子科技大学清水河校区, 综合楼 309	
	生物医学系统与人工智能论坛		
18:00-19:00	Dinner	Furong Restaurant 芙蓉餐厅	· UESTC
19:00	School Shuttle (From UEST	C to Hotel)	OESIC
	Day 4, Friday, Jun	ne 15, 2018	
8:30	School Shuttle (From Hotel to UESTC)	Holiday Inn Parking lot	Holiday Inn
6.30	School Shattle (From Floter to CESTE)	酒店停车场(一楼大堂外)	Honday IIII
	Sub-Forum 1	Room A:	
	"Electronic Information & Biomedicine"	The Auditorium, ESTI, UESTC	
	Outstanding Talent Forum	会议室 A:	
	"电子信息+生物医学"杰出人才论坛	电子科技大学清水河校区电科院报告厅	
	Sub-Forum 2	Poom P . Poom 401 Zonch	a Duilding LIESTC
9:00-11:00	Biomedical Materials and Micro-nano Devices	Room B: Room 401, Zonghe Building, UES	
9:00-11:00	Forum	Qingshuihe Campus	☆豆 /冷人₩ 401
	生物医用材料与微纳米器件论坛	会议室 B: 电子科技大学清水河	仪区,综合俊 401
	Sub-Forum 3	Room C: Room 309, Zongh	a Duilding LIESTC
	Biomedical Systems and Artificial		e Building, OESIC,
	Intelligence(AI) Forum	Qingshuihe Campus	
	生物医学系统与人工智能论坛	会议室 C: 电子科技大学清水河校区,综合楼 30g	
11:00-11:20		Break	
11:20-11:40	Closing Ceremony & Best Poster Presentation Award	Room A: The Auditorium, ESTI, UESTC 会议室 A: 电子科技大学清水河校区电科院	报告厅
12:00-13:00	Lunch	Furong Restaurant 芙蓉餐厅	UESTC
13:00	School Shuttle (From UEST	C to Hotel)	
13:30	Check-out	Front Desk	Holiday Inn

#### **Sub-Forum 1**

#### "Electronic Information & Biomedicine" Outstanding Talent Forum "电子信息+生物医学"杰出人才论坛

June 14 -15, 2018

Room A: The Auditorium, ESTI, UESTC (电子科技大学清水河校区电科院报告厅)

	Day 3, Thursday, June 14, 2018	
14:00-14:10	Opening Speech	Host: Qin Yuan (袁勤)
14:10-14:20	Welcome Speech by UESTC Leader	Speaker:***
	Invited Talks	
	Dezhong Yao(尧德中)	
14:20-14:50	University of Electronic Science and Technology of China, Chengdu, China	
	Cloud Platform for Brainformatics	
	Xi Xie (谢曦)	
14:50-15:20	Sun Yat-Sen University, Guangzhou, China	Hoote Versities (南下本)
	Nanostraw-device for highly efficient gene transfection	Host: Yufei Liu(刘玉菲)
	Weiwei Zhao(赵维巍)	
15.20 15.50	Harbin Institute of Technology, Shenzhen, China	
15:20-15:50	A general approach for flexible and foldable low-resistivity	
	paper/fabric-based electronics	
15:50-16:20	Coffee Break & Group Photo	
	Yufei Liu(刘玉菲)	
16:20-16:50	Chongqing University, Chongqing, China	
10.20-10.30	Integrated Microsystems for Early Diagnosis and Precision Bio-Medical	
	Application	
	Xiaochen Dong(董晓臣)	
16:50-17:20	Nanjing Tech University, Nanjing, China	Host: Weiwei Zhao (赵维巍)
	NIR Photosensitizers for Targeted Cancer Phototherapy	
	Xing Ma(马星)	
17:20-17:50	Harbin Institute of Technology, Shenzhen, China	
	Micro/Nano-Motors for Biomedical Applications	
	Day 4, Friday, June 15, 2018	
	Zhizhao Che(车志钊)	
	Tianjin University, Tianjin, China	
9:00-9:30	Heat and mass transfer in simple and compound droplets moving in	
	microchannels	
	Huajin Tang(唐华锦)	1
9:30-10:00	Sichuan University, Chengdu, China	Host: Yuejun Kang (康跃军)
	Neuromorphic Computing Approach to Auditory and Visual Perception	
	Tuan Guo(郭团)	
10:00-10:30	Jinan University, Guangzhou, China	
	Plasmonic fiber-optic biochemical and electrochemical sensing	
10:30-11:00	Wei Liu(刘威)	

Wuhan University, Wuhan, China	
Nanomaterials based cancer diagnosis and therapy	

#### **Sub-Forum 2**

#### Biomedical Materials and Micro-nano Devices Forum 生物医用材料与微纳米器件论坛

June 14 -15, 2018

Room B: Room 401, Zonghe Building, UESTC, Qingshuihe Campus (电子科技大学清水河校区综合楼 401)

	Day 3, Thursday, June 14, 2018	
	Invited Talks	
	Hejun Du(杜和军)	
14:00-14:30	Nanyang Technological University, Singapore	
14.00-14.30	Manipulation of Microparticles Into 3D Matrix Patterns Using Standing	
	Surface Acoustic Waves Microfluidics	
	Guoqing Hu(胡国庆)	Session Chair:
14:30-15:00	Institute of Mechanics, Chinese Academy of Sciences, Beijing, China	Fei Duan(段飞)
	Inertial and Viscoelastic Effects for Micro/nano-particles Manipulation	
	Shi-Yang Tang(唐诗杨)	
15:00-15:30	University of Wollongong, Wollongong, Australia	
13.00-13.30	Microfluidic Mass Production of Stabilized and Stealthy Liquid Metal	
	Nanoparticles	
15:30-15:50	Coffee Break	
	Fei Duan (段飞)	
15:50-16:20	Nanyang Technological University, Singapore	Session Chair:
13.30-10.20	Controlled Wetting and Evaporation Transition in a Drying Sessile	Shi-Yang Tang (唐诗杨)
	Droplet	
	Oral Talks	
	Peng Xue(薛鹏)	
	Southwest University, Chongqing, China	
16:20-16:40	Surface Modification of Polydimethylsiloxane (PDMS) to Enhance	
	Hemocompatibility for Potential Applications in Medical Implants or	
	Devices	Session Chair:
	Qianbin Zhao(赵乾斌)	Session Chair: Shi-Yang Tang(唐诗杨)
16:40-17:00	University of Wollongong, Wollongong, Australia	Sin-lang lang (居 )例
10.40-17:00	Inertial microparticle manipulation by sheath flow-enhanced secondary	
	flow in slanted groove microchannel	
	Ye Tian (田野)	
17:00-17:20	The University of Hong Kong, Hong Kong, China	
	Bioinspired Cavity-Microfibers from Microfluidics	
	Day 4, Friday, June 15, 2018	
	Invited Talks	

9:00-9:30	Yi Zhang (张翼) Nanyang Technological University, Singapore Polydopamine-Modified Magnetic Digital Microfluidic Platform for Biosensing Fei Liu (刘飞)	Session Chair: <b>Jun Zhang(张</b> <b>俊)</b>
9:30-10:00	Wenzhou Medical University, Wenzhou, China  Isolation and Quantitative Analysis of Extracellular Vesicles for Cancer  Early Detection	
	Oral Talks	
10:00-10:20	Jun Zhang (张俊) Nanjing University of Science and Technology, Nanjing, China A Novel Single-layer Microchannel for Continuous Sheathless Single-stream Particle Inertial Focusing	
10:20-10:40	Xinyi Guo(郭欣仪) Tianjin University, Tianjin, China Cell Membrane Poration towards Intracellular Delivery based on Gigahertz Electromechanical Resonators	Session Chair: <b>Yi Zhang(张翼)</b>
10:40-11:00	Yang Yang(杨洋) Tianjin University, Tianjin, China Selective Trapping and Controllable Release of Single Cell via Three-Dimensional Acoustic Fluidics	

### **Sub-Forum 3**

## Biomedical Systems and Artificial Intelligence(AI) Forum 生物医学系统与人工智能论坛

June 14 -15, 2018

Room C: Room 309, Zonghe Building, UESTC, Qingshuihe Campus (电子科技大学清水河校区综合楼 309)

Day 3, Thursday, June 14, 2018		
	Invited Talks	
	Feng Guo(郭峰)	
14:00-14:30	Indiana University, Bloomington, USA	
	Acoustofluidic Manipulation of Single Cells	
	Chunxia Zhao (赵春霞)	
14:30-15:00	The University of Queensland, Brisbane, Australia	
14:30-13:00	Engineered Micro/nanostructures for Drug Delivery and Controlled	Session Chair: Ling Yu (余玲)
	Release	
	Kan Liu(刘侃)	
15:00-15:30	University of Electronic Science and Technology of China, Chengdu, China	
15:00-15:50	Highly efficient isolation and accurate in situ analysis of circulating tumor	
	cells (CTCs) by a commercially available microfluidic device	
15:30-15:50	Coffee Break	
15:50-16:20	Ling Yu(余玲)	Session Chair: Chunxia Zhao

	Southwest University, Chongqing, China	(赵春霞)
	Fast Prototyping and Fabrication of Micro Devices in a Non-cleanroom	
	Setting	
	Oral Talks	
	Jin Yang(杨进)	
15201540	Chongqing University, Chongqing, China	
16:20-16:40	TENG based Pressure Sensor for Continuous Measurement of Human	
	Arterial Pulse Wave	
16 10 17 00	Huaying Chen (陈华英)	Session Chair: Chunxia Zhao
	Harbin Institute of Technology, Shenzhen, China	(赵春霞)
16:40-17:00	Distance-based Quantification of Blood Glucose using a Paper-based	(必合良)
	Microfluidic Device	
	Zifei Xu(徐梓菲)	
17:00-17:20	Nanjing University of Aeronautics & Astronautics, Nanjing, China	
17.00-17.20	Development of a Portable Electrical Impedance Tomography System	
	with Red Pitaya STEMlab	
	Day 4, Friday, June 15, 2018	
	Invited Talks	
	Lei Xi(奚磊)	
9:00-9:30	Southern University of Science and Technology, Shenzhen, China	
7.00-7.30	Miniaturization in photoacoustic microscopy and its applications in	
	microfluidics	
	Wenxue Wang (王文学)	Session Chair: Peng Xue (薛鹏)
	Chengdu Tianxia120 Co., Ltd, Chengdu, China (成都天下医森数字科技有限	
9:30-10:00	公司)	
9:30-10:00		
9:30-10:00	公司)	
9:30-10:00	公司) The Application of Intelligent Digital Technology in the Active Health	
9:30-10:00	公司) The Application of Intelligent Digital Technology in the Active Health Management	
	公司) The Application of Intelligent Digital Technology in the Active Health Management Oral Talks	
9:30-10:00	公司) The Application of Intelligent Digital Technology in the Active Health Management  Oral Talks  Shuting Pan(潘书婷)	Session Chair: Wenvue Wang
	公司) The Application of Intelligent Digital Technology in the Active Health Management  Oral Talks  Shuting Pan(潘书婷) Tianjin University, Tianjin, China	Session Chair: <b>Wenxue Wang</b> (王文学)
	公司) The Application of Intelligent Digital Technology in the Active Health Management  Oral Talks  Shuting Pan(潘书婷) Tianjin University, Tianjin, China A Label-free Immunosensor based on Gigahertz Resonator Enhanced	Session Chair: <b>Wenxue Wang</b> (王文学)
10:00-10:20	公司) The Application of Intelligent Digital Technology in the Active Health Management Oral Talks Shuting Pan(潘书婷) Tianjin University, Tianjin, China A Label-free Immunosensor based on Gigahertz Resonator Enhanced Fibre Optic SPR	O
	公司) The Application of Intelligent Digital Technology in the Active Health Management Oral Talks Shuting Pan(潘书婷) Tianjin University, Tianjin, China A Label-free Immunosensor based on Gigahertz Resonator Enhanced Fibre Optic SPR Changhao Li(李长昊)	J