Workshop on Simulation and Modeling of Emerging

Electronics (SMEE) 2018 Program

Eight year of the Area of Excellence (AoE) on Theory, Modeling, and Simulation of Emerging Electronics

Monday, October 15, 2018			
08:20 - 09:00 Registration			
Chairperson: Prof. Hong Guo, HKU&McGill			
08:40 - 09:00	Welcome Address and Photo taking		
		Jian Wang, The University of Hong Kong	
09:00 - 09:45	Keynote 1:	Mark A. Reed, Yale University	
		Nanofluidic Ionic Devices	
09:45 -10:10	Invited 1:	Zhenyu Zhang, University of Science and Technology of China	
		Crossing over from three-dimensional nonequilibrium growth to two-dimensional van der Waals epitaxy	
10:10 -10:35	AoE 1:	Fei Liu, The University of Hong Kong	
		Cold Source Transistor: Energy Efficient Switching by Source Density of States Engineering	
10:35 - 11:00 Tea Break			
Chairperson: Prof. Jiannong Wang			
Hong Kong University of Science and Technology			
11:00 - 11:45	Keynote 2:	Thomas Szkopek, McGill University	
		Device Engineering with 2D Materials	
11:45 -12:10	Invited 2:	Lan Chen, Institute of Microelectronics, Chinese Academy of Sciences	
		The Modeling Technologies for Design and Manufacture Co-	
		optimization	
12:10 - 14:00 Lunch Break			
	Ch	airperson: Prof. Jian Wang, HKU	
14:00 - 14:45	Keynote 3:	Enge Wang, Chinese Academy of Sciences	
		Full quantum nature of interfacial water	
14:45 - 15:10	Invited 3:	Lvzhou Li, Sun Yat-sen University	
		当大数据遇到量子计算谈谈量子算法	
15:10 - 15:35	AoE 2:	Wang Yao, The University of Hong Kong	
		Spintronics in the moire	
15:35 - 16:00 Tea Break			
Chairperson: Prof. Zhenyu Zhang, USTC			
16:00 - 16:25	Invited 4:	Tai Min, Xi'an Jiaotong University	
	T 1, 1 7	Interfacial Magnetism and Its Application to STT-MRAM	
16:25 -16:50	Invited 5:	Yan Zhou, The Chinese University of Hong Kong, Shenzhen	
18:00 - 21:00	Banquet	Magnetic Skyrmions in Nanostructures	

Tuesday, October 16, 2018				
Chairperson: Prof. Min Tai, XJTU				
09:00 - 09:25	Invited 6	Xuefeng Guo, Peking University		
		Carbon Electrode-Molecule Junctions: A Reliable Platform		
		for Molecular Electronics		
09:25 - 09:50	AoE 3	Qin Liu, The University of Hong Kong		
		Computational Methodologies for Heterogeneous		
		Electromagnetic Systems		
09:50 -10:15	AoE 4	Mansun Chan, Hong Kong University of Science and		
		Technology		
		i-MOS: a Cloud Based Circuit Simulation and Compact		
		Modelling Platform		
10:15 - 10:40 Tea Break				
Chairperson: Prof. Keli Wu,				
The Chinese University of Hong Kong				
10:40 - 11:05	Invited 7:	Jinfeng Kang, Peking University		
		Non-volatile Memory Based Computing Paradigms for High-		
44 07 44 20	A 75.5	Efficiency Data Processing		
11:05 - 11:30	AoE 5:	Hong Guo, HKU&McGill		
		Computational Materials Science by RESCU - a KS-DFT		
11 20 11 15		Method for Solving Thousands of Atoms		
11:30 - 11:45	Closing Remarks			
	Fuchun Zhang, The University of Hong Kong & University of Chinese			
Academy of Sciences				
11:45 - 14:00 Lunch Break				
14:00 - 15:00	Free Discussion			
15:00 - 18:00	Hiking			