

**2019 Academic Forum of the Institute of Medical Robotics, SJTU
Workshop on Advanced Smart Materials**

Location: Translational Medicine Building, Minhang Campus, SJTU

Date: December 11 (Wednesday)

9:00-9:30 Keynote

Study on implantable material-tissue interaction and biomedical applications

Jiang Chang

Shanghai Institute of Ceramics, Chinese Academy of Sciences

9:30-10:00 Invited

Semiconductor Fibers for Soft Robotics

Gang Wang

State Key Laboratory for Modification of Chemical Fibers and Polymer Materials, Donghua University

10:00-10:20

Stimuli-responsive polymeric materials for actuating

Yujie Chen

School of Materials Science and Engineering, SJTU

Coffee Break 10:20-10:40

10:40-11:10 Invited

Mid-infrared optical fibers for hard and soft tissue laser surgery

Guangming Tao (陶光明)

School of Optical and Electronic Information and Wuhan National Laboratory for Optoelectronics, Huazhong University of Science and Technology

11:10-11:40 Invited

Self-Adaptive Artificial Muscles for Advanced Thermal Management

Xiaoshi Qian

School of Mechanical Engineering, Shanghai Jiao Tong University

11:40-12:00

Molecular Motions in Polymer Matrix for Microenvironment Sensing

Yanhua Cheng

State Key Laboratory for Modification of Chemical Fibers and Polymer Materials, College of Materials Science and Engineering, Donghua University, Shanghai, China

Lunch

14:00-14:30 Keynote

Rational Design and Scalable Fabrication of Three-Dimensional Porous Superstructures for High-Performance Self-Powered Electromechanical Devices and Water Purification Systems

Donglei (Emma) Fan

Texas Materials Institute, Department of Mechanical Engineering, University of Texas at Austin

14:30-15:00 invited

Special knitting technology for textile flexible structure materials and technical applications

Jinhua Jiang

College of Textiles, Donghua University

15:00-15:20

Soft microfluidics and its application in wearable sensors and rare cell sorting

Xiaobo Gong

Department of Engineering Mechanics, NAOCE, Shanghai Jiao Tong University

15:20-15:40

Development of NiTi thermal driving smart fibers with excellent fatigue lifetime

Mingjiang Jin

Institute of Phase Transformation and Complex Structure, School of Materials Science and Engineering, Shanghai Jiao Tong University

15:40-16:00

3D 打印在医疗与康复中的应用

Jing Wang 王晶

西安交通大学

Coffee Break & Free Discussion 16:00-16:30

Contact person

Professor Xuejun JIN / 金学军 教授

上海交通大学材料科学与工程学院 / 医疗机器人研究院

Email: jin@sjtu.edu.cn

Wechat: jinatsjtu