



List of Staff Awards for Clinical Engineering



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**1 Excellent courses (first-class courses, key courses, etc.)**

Serial Number	Level	Course Name	Person in Charge	Team Members	Approval Time
1	Key courses in Shanghai	Principles and Applications of Life Support Devices	Chen Zhenglong,	Liu Yang	2024
2	Key courses in Shanghai	Intelligent Medical Control Technology	Yang Hui	Yang Gore, Peng Anmin, Guo Shijun	2024
3	Top tier undergraduate courses in Shanghai	Virtual simulation experiment on full process safety control of high-intensity ultrasound ablation diagnosis and treatment of malignant liver tumors	Li Xiaou, Lv Dan	Yan Jiayong, Guo Shijun, Si Boyu, Hao Lijun	2021
4	Top tier undergraduate courses in Shanghai	Virtual simulation experiment on ventilator malfunction and emergency response under epidemic control	Pure Jade, Xu Jun	Shang Huaichao, Chen Zhenglong	2021
5	First class undergraduate courses at the university level	Engineering Mechanics	Lu Jie	Ding Hao, Yang Gore	2021
6	First class undergraduate courses at the university level	Professional English for Clinical Engineering Technology	L ü Dan		2022
7	First class undergraduate courses at the university level	Clinical Skills Studies	Qin Liang		2021
8	Key courses at the school level	Principles and Applications of Life Support Devices	L ü Dan	Cheng Haipin	2021
9	School level ideological and	Medical Electrical Safety	Liu Yang		2021



	political demonstration courses				
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2 Teaching Achievement Awards

Serial Number	Level	Reward Name	Awardee	Approval Time
1	provincial and ministerial level	Second Prize for Outstanding Cases in Deepening Reform of Higher Vocational Education in Shanghai	L ü Dan, Chen Zhenglong, Liu Yang, Shang Kun, Guo Shijun, Xu Jun, Shi Shouren, Zhang Xin	2022

3 Science and Technology Awards

1. CHEN Qingkui was awarded the third prize of “Shanghai Science and Technology Award” titled “Large-scale Cluster Parallel Architecture with Dynamic Double-loop Structure” in 2015.

4 Excellent Teaching Materials and Textbooks

1. “Introduction to Biomedical Materials”, published by Tongji University Press in 2016, Compiled by: Jie Lyu, Jing Cheng.
2. “Maintenance of Hemodialysis Equipment”, published by China Labor and Social Security Press in 2022. Compiled by: Jun Xu.
3. “Application and Design of Medical Instruments”, published by Science Press in 2017. Compiled by: Chunyu Shan.
4. “Introduction to Principles and Structures of Medical Therapeutic Devices (2nd Edition)”, published by Shanghai Jiao Tong University Press in 2016. Compiled by: Haiping Cheng.



5 Examples of SCI Paper Published

Serial Number	Author	Title	Journal	Time
1	Jun Ai	An improved robust finite-time dissipative control for uncertain fuzzy descriptor systems with disturbance	International Journal of Systems Science	2017
1	Lin Xiangde; Sun Wenwen; Yao Wanchen (Xue); Wang Zhonglin (Outer); Sun Qijun (Outer)	Piezotronic neuromorphic devices: principle, manufacture, and applications	International Journal of Extreme Manufacturing	2024
2	Promise (external); Lin Xiangde; Sun Qijun (Outer)	Sustainable paper electronics and neuromorphic paper chip	Nanotechnology	2024
3	Lin Xiangde; Mo Yanhong (Xue); Dai Yuhang (Xue); Yan Yuzhong; Zeng Dongdong; Yang Hui	The layer-by-layer assembled ERGO+/ERGO- multilayer modified electrode for sensitive detection of dopamine	Materials Research Express	2024
4	Liu Yubo; Chen Xiaohong (external); Lin Xiangde; Yan Jiayong; Yu Dengguang (outside); Liu Ping (external); Yang Hui	Electrospun multi-chamber core-shell nanofibers and their controlled release behaviors: A review	WILEY INTERDISCIPLINARY REVIEWS-NANOMEDICINE AND NANOBIO TECHNOLOGY	2024
5	Yao Wanchen (Xue); Lin Xiangde; Yang Hui	Pursuing superhydrophobic flexible strain sensors: from design to applications	Advanced Materials Technologies	2024
6	Jiao Haishuang (external); Lin Xiangde; Wang Zhonglin (Outer); Sun Qijun (Outer)	Thermal insulating textile based triboelectric nanogenerator for outdoor wearable sensing and interaction	Nano Energy	2024
7	Dai Chen (external); Lin Xiangde; Chen Yu	Mesoporous ternary nanozymes with anti-senescence and anti-inflammation activities for atherosclerosis management	Advanced Functional Materials	2024



	(external); Zhang Bo (external)			
8	Yao Wanchen (Xue); Yan Yuzhong; Sun Jianlei (external); Sun Wenwen; Cheng Jing; Zhao Hui; Xie Meihua; Sun Qijun (external); Yellow steel; Lin Xiangde	Mechanically Durable Superhydrophobic Strain Sensors with High Biocompatibility and Sensing Performance for Underwater Motion Monitoring	ACS Applied Materials & Interfaces	2024
9	Zhao Hui	Torsional failure analysis of C/SiC and SiC/SiC combined CMC torque tube	PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS	2024
10	Lin Xiangde; Sun Qijun (Outer)	Electric-double-layer-gated 2D transistors for bioinspired sensors and neuromorphic devices	International Journal of Smart and Nano Materials	2024
11	Wang Yifei (external); Lin Xiangde; Wang Zhonglin (Outer); Sun Qijun (Outer)	Tribotronic vertical field-effect transistor based on van der Waals heterostructures	Advanced Functional Materials	2024
12	Cheng Jing; Sun Wenwen; Zeng Dongdong; Lin Xiangde	Tetrahedral DNA-mediated biomineralization of calcium carbonate nanoparticles for pH? responsive drug delivery	JOURNAL OF NANOPARTICLE RESEARCH	2023
13	Tu Huating; Li Xiaou; Lin Xiangde; Lang Chenhong (external); Gaoyang (Outer)	Washable and Flexible Screen-Printed Ag/AgCl Electrode on Textiles for ECG Monitoring	Polymers	2023
14	Zhou Chuanqing; Yang Kun (external); Lu Yufei (Outer)	NRNet: System for recommending referrals for community screening of diabetic retinopathy based on deep learning	Experimental Biology and Medicine	2023
15	Sun Wenwen; Xu Qinchen (Xue); Sun Jiwei (Xue); Lin	Design and Development of Biosensors for Progesterone Detection	Journal of Sensors	2023



	Xiangde; Pan Hongzhi			
16	Zhao Hui; Zhang Jiaxin (external)	A novel and predictive process of manufacturing 3DN C/SiC torque tube	Material research express	2023
17	Ren Liujie (external); Yu Yi; Zhang Yuheng (external); Liu Xindong (external); Sun Zengjun (foreign); Yao Wenjuan (external); Zhang Tianyu (external); Wang Cheng (external); Li Chenlong (Outer)	Three-dimensional finite element analysis on cochlear implantation electrode insertion	Biomechanics and Modeling in Mechanobiology	2022
18	Ying Na (Xue); Lin Xiangde; Xie Meihua; Zeng Dongdong	Effect of surface ligand modification on the properties of anti-tumor nanocarrier	Colloids and Surfaces B: Biointerfaces	2022
19	Ximeng Feng (external); Zi Jin (external); Zixia Zhou (external); Mengdi Gai (external); Chunxia Jiang (external); Yicheng Hu (external); Yanye Lu (external); Jinying Li (external); Qiushi Ren (external); Zhou Chuanqing	Retinal oxygen kinetics imaging and analysis (ROKIA) based on the integration and fusion of structural-functional imaging	Biomedical Optics Express	2022
20	Sun Wenwen; Lv Kai (external); Lou Yisha (student); Zeng Dongdong; Lin Xiangde	Highly durable superhydrophobic surfaces based on a protective frame and crosslinked PDMS-candle soot coatings	Materials Research Express	2022
21	Xia Pengpeng (Xue); Chen Jiangtai (Xue); Shi	Research progress on naphthalimide based optical probes for monitoring the physicochemical properties of microenvironments	Organic Chemistry	2022



	Gaofan (Xue); Zhang Mengmeng (Xue); Yao Wanchen (Xue); Lin Xiangde; Zeng Dongdong	and active sulfur substances		
22	Sun Wenwen; Huo Juntao (external); Fu Qingyan (external); Zhang Yuxin (Xue); Lin Xiangde	Influence of Meteorological Factors and Chemical Processes on the Explosive Growth of PM2.5 in Shanghai, China	Atmosphere	2022
23	He Xiaoyan (external); Li Hui (Xue); Liu Sisi (Xue); Li Yue; Lin Xiangde; Zheng Haoyang (external); Zhou Zhaoli; Zeng Dongdong	Synthesis of a Single-Stranded DNA Aptamer Modified Near-infrared, Water-Soluble Fluorophore for Lung Cancer Cell Imaging.	ChemistrySelect	2022
24	Chen Zhenglong	Effects of the Lower Airway Secretions on Airway Opening Pressures and Suction Pressures in Critically Ill COVID-19 Patients: A Computational Simulation	Annals of Biomedical Engineering	2021
25	Chen Zhenglong; Hu Zhaoyan	Potential effect of pulmonary fluid viscosity on positive end-expiratory pressure and regional distribution of lung ventilation in acute respiratory distress syndrome	clinical biomechanics	2021
26	Chen Zhenglong; Bell ringing (outside); Luo Yuzhou; Deng Linhong (external); Hu Zhaoyan; Song Yuanlin (Outer)	Determination of Rheology and Surface Tension of Airway Surface Liquid: A Review of Clinical Relevance and Measurement Techniques	Respiratory Research	2020
27	Ding Hao; Zhang Ying (Xue); Liu Yujia (Xue); Shi Chunxun (Xue); Nie Zhichao (Xue); Chen Zehua (Xue)	Simulated coronary arterial hemodynamics of myocardial	Rev Cardiovas Med	2020
28	Ding Hao; Zhang Ying (Xue); Liu Yujia (Xue); Shi	Analysis of Vascular Mechanical Characteristics after Coronary Degradable Stent Implantation	BioMed Research International	2020



Shanghai University of Medicine & Health Sciences

	Chunxun (Xue); Nie Zhichao (Xue); Liu Haoyu (student)			
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6 Patents (Invention Patents)

Serial Number	Name	Patent Type	Inventor	Time
1	A polysaccharide crosslinked antibacterial film	Invention Patent	Lin Xiangde; Zeng Dongdong; Chen Yuzhu	2024-01-30
2	A cell culture device and method under the correlation of pressure and unidirectional strain	Invention Patent	Ding Hao; Wei Ping	2024-01-23
3	Inverted defibrillation pulse generator	Invention Patent	Pure jade; Li Ping	2023-10-24
4	A four-bar linkage venipuncture advancement and retraction needle execution device with needle picking action	Invention Patent	Ding Hao; Zhuang Yi; Kan Mengfei; Xia Dongyang; Ding Siji; Liu Haoyu	2022-07-15
5	A wall coronary artery circumferential stress in vitro simulation system	Invention Patent	Ding Hao; Liu Yujia; Zhang Ying	2022-07-12
6	Ultra low voltage energy storage defibrillator	Invention Patent	Pure jade; Li Ping; Zhang Xingfang; Pan Ling; Gu Wangjing; Tang Shiting	2021-09-21
7	A detachable and autonomously movable multifunctional nursing bed device	Invention Patent	Ding Hao; Shi Chunxun; Liu Haoyu	2021-06-15
8	A two-dimensional ultrasonic guide cane based on voltage lattice stimulation	utility model	Cheng Hai relied on; Wang Yan; Pure jade	2020-08-18
9	A two-dimensional ultrasonic guide cane based on electric current lattice stimulation	utility model	Cheng Hai relied on; Wang Yan; Pure jade	2020-07-31
10	A two-dimensional ultrasonic guide cane based on multi-point vibration frequency transmission information	utility model	Cheng Hai relied on; Wang Yan; Pure jade	2020-07-31