

# Curriculum Vitae

<b>Personal Information</b>	<b>Name</b>	Zhang Caixia	<b>Gender</b>	Female	
	<b>Academic Title</b>	Associate Professor			
	<b>College</b>	Beijing University of Technology			
	<b>Discipline</b>	Mechanical Engineering			
	<b>Email</b>	zhang-cx15@bjut.edu.cn			
	<b>Mail Add.</b>	100 Ping Le Yuan, Chaoyang District, Beijing, P.R. China, 100124			
<b>Educational Background</b>	Ph.D., Mechanical Engineering, Tsinghua University, 2015 B.S., Agricultural Mechanization and Automation Jilin University, ,2010				
<b>Working Experience</b>	06.2018–still Beijing University of Technology Associate Professor, Faculty of Materials and Manufacturing 07.2015-06.2018 Beijing University of Technology lecturer, College of Mechanical Engineering and Applied Electronics Technology				
<b>Research Interests</b>	Superlubricity Friction regulation Intelligent production line Digital Twins technology				
<b>Major Publications*</b>	<p>[1] Caixia Zhang, Junmin Chen, Mengmeng Liu, Yuhong Liu, Zhifeng Liu, Hongyan Chu, Qiang Cheng &amp; Jianhua Wang Regulation mechanism of biomolecule interaction behaviors on the superlubricity of hydrophilic polymer coatings, Friction, 2020</p> <p>[2] Liu Zhifeng, Chen Wei, Zhang Caixia*, Yang Congbin, Cheng Qiang Intelligent Scheduling of a Feature-Process-Machine Tool Supernetwork Based on Digital Twin Workshop, Journal of Manufacturing Systems, 2020</p> <p>[3] ZhifengLiu, KaiJiang, XiangminDong, CaixiaZhang*, YangTian, QiushiHu A Research Method of Bearing Coefficient in Fasteners Based On Fractal and Florida Theory, tribology international, 2020</p> <p>[4] Liu Zhifeng, Liu Mengmeng, Liu Yuan, Zhang Caixia*, Wang Xianzhang, Ma Liran, Cai Hongyun, Cheng Qiang Molecular arrangement mechanisms within phosphate films on Ti6Al4V regulated by intermolecular forces based on sum frequency generation vibrational spectroscopy, Applied Surface Science, 2020</p> <p>[5] Liu Zhifeng, Chen Wei, Zhang Caixia*, Yang Congbin, Chu Hongyan Data Super-Network Fault Prediction Model and Maintenance Strategy for Mechanical Product Based on Digital Twin, IEEE Access, 2019</p> <p>[6] Zhang Caixia, Song Zhiqiong, Liu Zhifeng*, Yang Congbin, Cheng Qiang, Liu Mengmeng Wear Mechanism of Flexspline Materials Regulated by Novel Amorphous/Crystalline Oxide Form Evolution at Frictional Interface, tribology international, 2019</p> <p>[7] Zhang Caixia, Song Zhiqiong, Liu Zhifeng*, Yang Congbin, Cheng Qiang, Liu Mengmeng Tribological properties of flexspline materials regulated by micro-metallographic structure, tribology international, 2018</p> <p>[8] Zhang Caixia, Liu Yuhong*, Liu Zhifeng*, Zhang Hongyu, Cheng Qiang, Yang Congbin Regulation mechanism of salt ions for superlubricity of hydrophilic polymer cross-linked networks on Ti6Al4V, Langmuir, 2017</p> <p>[9] Zhang Caixia, Liu Zhifeng, Liu Yuhong*, Ren Jing, Cheng Qiang, Yang Congbin Novel tribological stability of the superlubricity poly (vinylphosphonic acid)(PVPA) coatings on Ti6Al4V: Velocity and load independence, Applied Surface Science, 2017</p> <p>[10] Zhang Caixia, Liu Zhifeng, Liu Yuhong, Cheng Qiang, Yang Congbin, Cai Ligang Investigation of the mechanisms for stable superlubricity of poly(vinylphosphonic acid) (PVPA) coatings affected by lubricant, Friction, 2016</p>				

<b>Research Projects*</b>	National Science and Technology Major Special Projects National Natural Science Foundation of China Beijing Natural Science Foundation
<b>Professional Membership</b>	Committee Member of Cartography Committee of Chinese graphic society
<b>Potential Research Projects**</b>	National Natural Science Foundation of China and National Science Center of Poland

\* Please list achievements of recent 5 years

\*\* This CV is intended to match Chinese and Polish Scientists within SPUC member universities, and Potential Research Projects is intended to apply for Sino-Polish or EU scientific cooperation projects.