

师资队伍/个人信息

姓名	郑恩来	性别	男	
职称	副教授	系别	机械工程系	
学位	博士/硕导			
E-mail	enlaizheng@njau.edu.cn			
单位地址	南京市浦口区点将台路 40 号		邮编	210031
研究领域	复杂机电系统动力学与智能控制，农业车辆系统振动理论与减振技术			
社会兼职	中国振动工程学会机械动力学委员会会员			
承担项目	主持的项目： 1. 国家自然科学基金: 高速冲压工况下多连杆超精密压力机动态精度影响机理与误差补偿研究（编号：51405238），2015/01-2017/12. 2. 江苏省自然科学基金: 多连杆高速超精密压力机动态精度分析与误差补偿研究（编号：BK20140728），2014/07-2017/06. 3. 中央高校基本科研业务费重大专项: 高档锻压机床智能化专用数控系统开发（编号：KYTZ201603），2016.01.01-2017.12.31. 4. 中央高校基本科研业务费项目: 高速冲压工况下多连杆超精密压力机动态精度影响机理与误差补偿研究（编号：KJQN201558），2015/01-2017/12. 5. 中国博士后基金: 高速犁耕下拖拉机/农具系统操纵稳定性影响机理研究（编号：2016M591855），2015/01-2017/12. 6. 江苏省博士后基金: 刚度与阻尼可调式拖拉机驾驶室半主动座椅悬架系统控制理论与试验研究（编号：KJQN201558），2014/03-2016/03. 7. 南京农业大学工学院优秀青年人才科技基金: 多连杆高速精密伺服压力机振动特性分析与伺服控制策略研究（编号：YQ201606），2016/01-2018/12. 8. 南京农业大学科研启动金项目: 高速精密压力机非线性隔振理论及应用研究（编号：rcqd13-07），2013/11-2015/11.			
	参与的项目： 1. 江苏省科技支撑项目: 高效节能大马力拖拉机液压机械无级变速箱的研发(编号：1401049B)，2014/07-2017/06. 2. 江苏省科技成果转化项目: 高精度伺服电机驱动数控压力机的研制（编号：BA2008030），2008/10-2011/01.			

学术成果

近 5 年主要论文：

1. **Enlai Zheng***, Yindong Fan, Rui Zhu, Yue Zhu, Jieyu Xian. Prediction of the vibration characteristics for wheeled tractor with suspended driver seat including air spring and MR damper[J]. *Journal of Mechanical Science and Technology*, 2016, 30 (9): 1-14. (SCI 收录, IF: 0.838)
2. **Enlai Zheng***, Rui Zhu, Sihong Zhu, Xinjian Lu. A study on dynamics of flexible multi-link mechanism including joints with clearance and lubrication for ultra-precision presses[J]. *Nonlinear Dynamics*, 2016, 83: 137-159. (SCI 收录, IF: 2.849)
3. 郑恩来, 张航, 朱跃, 康敏. 含间隙超精密压力机柔性多连杆机构动力学建模与仿真. *农业机械学报*, 2016. (出版中) (EI 收录)
4. Gaoyan Zhong, Chaoqun Wang, Shoufeng Yang, **Enlai Zheng**, Yanyan Ge. Position geometric error modeling, identification and compensation for large 5-axis machining center prototype[J]. *International Journal of Machine Tools and Manufacture*, 2015, 89: 142-150. (SCI 收录, IF: 3.037)
5. **Enlai Zheng**, Xincheng Sun, Min Kang. Structural optimal design of combined frame for closed high speed press system[C]. 2015 International Conference on Simulation, Modelling and Mathematical Statistics (SMMS2015), Thailand, December 22-23, 2015. (EI 收录)
6. **Enlai Zheng***, Fang Jia, Sihong Zhu. Thermal modeling and characteristics analysis of the high speed press system[J]. *International Journal of Machine Tools and Manufacture*, 2014, 85: 87-99. (SCI 收录, IF: 3.037)
7. **Enlai Zheng***, Fang Jia, Xinlong Zhou. Energe-based method for nonlinear characteristics analysis of Belleville springs[J]. *Thin-Walled Structures*, 2014, 79: 52-61. (SCI 收录, IF: 1.749)
8. **Enlai Zheng***, Xinlong Zhou. Modeling and simulation of flexible slider-crank mechanism with clearance for closed high speed press system[J]. *Mechanism and Machine Theory*, 2014, 74: 10-30. (SCI 收录, IF: 1.66)
9. **Enlai Zheng***, Xinlong Zhou, Sihong Zhu. Dynamic response analysis of block foundations with nonlinear dry friction mounting system to impact loads[J]. *Journal of Mechanical Science and Technology*, 2014, 28(7): 2535-2548. (SCI 收录, IF: 0.838)
10. **Enlai Zheng**, Fang Jia, Hongwei Sha, Suohao Wang. Non-circular belt transmission design of mechanical press[J]. *Mechanism and Machine Theory*, 2012, 57: 126-138. (SCI 收录, IF: 1.66)
11. **Enlai Zheng**, Fang Jia, Zhisheng Zhang, Jinfei Shi. Dynamic modelling and response analysis of closed high-speed press system[J]. *Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics*, 2012, 226(4): 315-330. (SCI 收录, IF: 0.69)
12. Fang Jia, Hongwei Sha, **Enlai Zheng**, Zhisheng Zhang. Mechanical properties of

	<p>disc springs combined with PU[C]. 19th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand. November, 2012. (EI 收录)</p> <p>13. Enlai Zheng, Fang Jia, Zhisheng Zhang, Jinfei Shi. Modeling and simulation of nonlinear combination disc-spring vibration isolator for high-speed press[J]. Mechatronics and Intelligent Materials, 2011, (211-212): 40-47. (EI 收录)</p> <p>14. Enlai Zheng, Fang Jia, Zhisheng Zhang, Jinfei Shi. Load spectrum analysis for combined frame of closed high-speed press[J]. Journal of Southeast University, 2011, 27: 40-46. (EI 收录)</p> <p>授权专利:</p> <p>1.一种可调阻尼组合隔振器, 发明专利, CN102094924A, 中国.</p>
奖励荣誉	<p>2016 年入选江苏省“青蓝工程”优秀青年骨干教师人才计划</p> <p>2016 年指导的毕业设计获南京农业大学一等奖</p> <p>2016 年获南京农业大学优秀共产党员荣誉称号</p> <p>2016 年获南京农业大学工学院优秀班主任荣誉称号</p> <p>2015 年入选南京农业大学第三批钟山学者“学术新秀”人才计划</p>

Teaching staff/ Personal information

Name	Enlai Zheng	Gender	Male	
Title	Associate Professor	Department	Mechanical Engineering	
Degree	Ph.D			
E-mail	enlaizheng@njau.edu.cn			
Unit address	#40 Dianjiangtai Road, Pukou District, Nanjing, Jiangsu Province, China		Post code	210031
Research field	1. Dynamic and intelligent control of complex electromechanical system 2. Vibration theory and isolation technology for agricultural vehicle system			
Social appointments	Member of Committee of Machine Dynamics, Chinese Society for Vibration Engineering			
Research projects	<p>[1] National Natural Science Foundation of China, Grant No. 51405238, Study on influence mechanism of dynamic accuracy and error compensation for multi-link ultra-precision presses under high speed stamping condition, 2015/01-2017/12, Project leader.</p> <p>[2] Natural Science Foundation of Jiangsu Province, Grant No. BK20140728, Study on analysis of dynamic accuracy and error compensation for multi-link ultra-precision presses, 2014/07-2017/06, Project leader.</p> <p>[3] The Fundamental Research Funds for the Central Universities, Grant No. KYTZ201603, Development of intelligent dedicated CNC system for forging machine tools, 2016/01-2017/12, Project leader.</p> <p>[4] The Fundamental Research Funds for the Central Universities, Grant No. KJQN201558, Study on influence mechanism of dynamic accuracy and error compensation for multi-link ultra-precision presses under high speed stamping condition, 2015/01-2017/12, Project leader.</p> <p>[5] Postdoctoral Fund of China, Grant No. 2016M591855, Study on handling stability of influence mechanism for tractor/implements system under high speed plow tillage condition, 2016/01-2017/12, Project leader.</p> <p>[6] Postdoctoral Research Funding Schemes of Jiangsu Province, Grant No. 1401049B, Theoretical and experimental research on the semi-active control of driver seat suspension system for tractor cab with stiffness and damping adjustable, 2014/03-2016/03, Project leader.</p> <p>[7] Innovation Fund of Science and Technology for Outstanding Youth from College of Engineering, Nanjing Agricultural University, Grant No. YQ201606, Research on</p>			

	<p>vibration characteristics and control strategy of multi-link high speed precision servo press system, 2016/01-2018/12, Project leader.</p> <p>[8] Starting Research Fund of Nanjing Agricultural University, Grant No. rcqd13-07, Research on vibration theory and application of tractor for paddy working condition, 2013/11-2016/11, Project leader.</p> <p>[9] National Natural Science Foundation of China, Grant No. 51275249, Research on vibration theory and application of tractor for paddy working condition, 2013/01-2015/12, Participant.</p> <p>[10] Jiangsu Fund Project for Transformation of Scientific and Technological Achievements, Grant No. BA2008030, Numerical Control Precision Press Driven by Servo Motor, 2008/11-2013/10, Participant.</p>
Academic achievements	<p>Papers (Published and Accept)</p> <p>[1] Enlai Zheng*, Rui Zhu, Sihong Zhu, Xinjian Lu. A study on dynamics of flexible multi-link mechanism including joints with clearance and lubrication for ultra-precision presses[J]. Nonlinear Dynamics, 2016, 83: 137-159. (SCI, IF: 2.849)</p> <p>[2] Enlai Zheng*, Yindong Fan, Rui Zhu, Yue Zhu, Jieyu Xian. Prediction of the vibration characteristics for wheeled tractor with suspended driver seat including air spring and MR damper[J]. Journal of Mechanical Science and Technology, 2016, 30(9): 1-14. (SCI, Online, IF: 0.838)</p> <p>[3] Enlai Zheng, Hang Zhang, Yue Zhu, Min Kang. Dynamic modeling and simulation of flexible multi-link mechanism including joints with clearance for ultra-precision press[J]. Journal of Agricultural Machinery, 2016. (EI, accepted, in Chinese)</p> <p>[4] Gaoyan Zhong, Chaoqun Wang, Shoufeng Yang, Enlai Zheng, Yanyan Ge. Position geometric error modeling, identification and compensation for large 5-axis machining center prototype[J]. International Journal of Machine Tools and Manufacture, 2015, 89: 142-150. (SCI, IF: 3.037)</p> <p>[5] Enlai Zheng*, Xincheng Sun, Min Kang. Structural optimal design of combined frame for closed high speed press system[C]. 2015 International Conference on Simulation, Modelling and Mathematical Statistics (SMMS2015), Thailand, December 22-23, 2015. (EI)</p> <p>[6] Enlai Zheng*, Fang Jia, Sihong Zhu. Thermal modeling and characteristics analysis of the high speed press system[J]. International Journal of Machine Tools and Manufacture, 2014, 85: 87-99. (SCI, IF: 3.037)</p> <p>[7] Enlai Zheng*, Fang Jia, Xinlong Zhou. Energe-based method for nonlinear characteristics analysis of Belleville springs[J]. Thin-Walled Structures, 2014, 79: 52-61. (SCI, IF: 1.749)</p> <p>[8] Enlai Zheng*, Xinlong Zhou. Modeling and simulation of flexible slider-crank mechanism with clearance for closed high speed press system[J]. Mechanism and</p>

	<p>Machine Theory, 2014, 74: 10-30. (SCI, IF: 1.66)</p> <p>[9] Enlai Zheng*, Xinlong Zhou, Sihong Zhu. Dynamic response analysis of block foundations with nonlinear dry friction mounting system to impact loads[J]. Journal of Mechanical Science and Technology, 2014, 28(7): 2535-2548. (SCI, IF: 0.838)</p> <p>[10] Enlai Zheng, Fang Jia, Hongwei Sha, Suhaao Wang. Non-circular belt transmission design of mechanical press[J]. Mechanism and Machine Theory, 2012, 57: 126-138. (SCI, IF: 1.66)</p> <p>[11] Enlai Zheng, Fang Jia, Zhisheng Zhang, Jinfei Shi. Dynamic modelling and response analysis of closed high-speed press system[J]. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2012, 226(4): 315-330. (SCI, IF: 0.69)</p> <p>[12] Fang Jia, Hongwei Sha, Enlai Zheng, Zhisheng Zhang. Mechanical properties of disc springs combined with PU[C]. 19th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand. November 28-30, 2012. (EI)</p> <p>[13] Enlai Zheng, Fang Jia, Zhisheng Zhang, Jinfei Shi. Modeling and simulation of nonlinear combination disc-spring vibration isolator for high-speed press[J]. Mechatronics and Intelligent Materials, 2011, (211-212):40-47. (EI)</p> <p>[14] Enlai Zheng, Fang Jia, Zhisheng Zhang, Jinfei Shi. Load spectrum analysis for combined frame of closed high-speed press[J]. Journal of Southeast University, 2011, 27: 40-46. (EI)</p> <p>Patents:</p> <p>[1] A combined vibration isolator with damper, CN201010596919.3, China.</p>
Reward & honor	<ol style="list-style-type: none"> 1. Gainer of Outstanding teacher for “Qing Lan Project” in Jiangsu Province, 2016 2. Excellent academic supervisor in Nanjing Agricultural University (NJAU), 2016 3. Excellent member of the Communist Party in NJAU, 2016 4. Excellent class teacher in College of Engineering, NJAU, 2016 5. Gainer of “Zhongshan Academic Rookie” in NJAU, 2015 (an award, for only one teacher each college and selected once every two year)