


机电工程学院教师个人简介

姓名	解妙霞	职称	副教授	
电子邮箱	x_m_xspace@163.com			
硕/博导师	硕士生导师			
教育背景	时间	院校经历		
	2006.09-2011.06	西安交通大学 博士研究生		
	2003.09-2006.07	陕西师范大学 硕士研究生		
	1996.09-2000.06	陕西师范大学 大学本科		
工作经历	时间	经历职位		
	2011.09-2014.09	西安交通大学 博士后		
	2012.04-2012.11	韩国科学技术研究院 BK21 博士后		
	2014.10-2015.11	西安建筑科技大学 讲师		
	2015.12-今	西安建筑科技大学 副教授		
主要研究方向	结构动力学分析、振动与噪声控制、增材制造			
主要荣誉/获奖情况	<ol style="list-style-type: none"> 1. 2019 年被评为优秀党员 2. 2020 年获西安建筑科技大学“青年教师标兵”称号 3. 2021 年被评为优秀党员 			
学术成果/科研项目	<p>参与主持项目 15 项，其中国家级 8 项，省部级 4 项，部分项目：</p> <ol style="list-style-type: none"> 1. 飞行器板壳结构高频动力学拓扑优化. 陕西省自然科学基金. 2. 复合材料板壳耦合结构高频动响应的试验与计算研究. 国家自然科学基金. 3. 能量有限元法预示复合材料结构高频响应的关键技术研究. 博士后基金. 4. 栓接结合部刚度和阻尼的不确定性量化与匹配设计. 陕西省工业攻关项目. 5. 弹性超材料齿轮轮体结构的禁带机制及减振特性应用研究. 陕西省自然科学基金. 6. 钛合金薄壁圆筒 3D 打印与后处理技术研发合同. 横向经费. 7. 超高强度钢增材制造数值仿真研究. 横向经费. 8. 热环境下飞行器结构声振耦合行为研究. 国家自然科学基金. 9. 热环境作用下飞行器结构声振耦合高频响应研究. 国家自然科学基金. 10. 预制混凝土构件工业化生产关键技术及装备. 国家科技部国家重点研发计划合作单位项目. 			

	<p>11. 介电弹性体动态换能机理及能量收集系统设计方法研究. 国家自然科学基金.</p> <p>12. 面向多学科设计的高效高保真非线性气动弹性降阶模型研究. 国家自然科学基金.</p> <p>13. 能量有限元法及其它动响应预示方法研究. 国家重大专项.</p> <p>14. 均匀/非均匀声场与振动耦合对***的作用及其天地映射关系研究. 973 项目子课题.</p>
<p>学术著作/ 论文期刊</p>	<p>发表论文 40 余篇, 其中 SCI 论文 15 篇, EI 论文 2 篇, 出版专著 1 部, 获批专利 5 项, 软件著作权 10 项, 相关论文:</p> <ol style="list-style-type: none"> 1. Miaoxia Xie , Peng Zhang, Minghui Zhu, Fengwei Gao, Lixia Li, Ling Li, Yueming Li. Energy Flow Analysis of High Frequency Flexural Vibration of Wedge Beam Structures. Shock and Vibration. 2022: 1-14, 2022 2. Miaoxia Xie, Xiangtao Shang, Yanxin Li, Zehui Zhang, Minghui Zhu, Jiangtao Xiong. Rotary Friction Welding of Molybdenum without Upset Forging. Materials. 13(8).2020. 3. Miaoxia Xie, Yanxin Li, Xiangtao Shang, Xuewu Wang, Junyu Pei. Effect of Heat Input on Porosity Defects in a Fiber Laser Welded Socket-Joint Made of Powder Metallurgy Molybdenum Alloy. Materials. 12(9),2019 4. Miaoxia Xie, Yanxin Li, Xiangtao Shang, Xuewu Wang, Junyu Pei. Microstructure and Mechanical Properties of a Fiber Welded Socket-Joint Made of Powder Metallurgy Molybdenum Alloy. Metals, 9(6),2019 5. Miaoxia Xie , Lixia Li, Shang Xiangtao , Jianping Zhao. Initial Investigation of Energy finite element Validation on high-frequency flexural vibration of stiffened thin orthotropic plates. Shock and Vibration. 2018: 1-10 6. Miaoxia Xie, Xiangtao Shang, Linjie Zhang, Qinglin Bai, Tingting Xu. Interface characteristic of explosive-welded and hot-rolled TA1/X65 Bimetallic plate. Metals. 8(3) ,159, 04 March, 2018. 7 Qi Zhu, Miaoxia Xie, Xiangtao Shang, Geng An, Jun Sun, Na Wang, Sha Xi, Chunyang Bu, Juping Zhang. Research Status and Progress of Welding Technologies for Molybdenum and Molybdenum Alloys. Metals.10(2) 279.2019 8 Miaoxia Xie, Linjie Zhang. Microstructure and mechanical properties of CP-Ti_X65 bimetallic sheets fabricated by explosive welding and hot rolling. Materials & Design. 87. p181-197.2015 9 Miaoxia Xie, Linjie Zhang. The influence of welding parameters on heat transfer efficiency of hybrid pulse Nd: YAG/GTAW welding. Advanced materials research. 1088. 2015 10 Miaoxia Xie, Wenwei Yao, Linjie Zhang. Energy density distribution on a rod excited by impact load. 2015 National conference on information technology and computer science. 2015 11 Miaoxia. Xie, JeongGuon Ih, Taekyoon Kim, Yueming Li. Prediction of acoustic power transmission of fluid-filled thin pipe based on impedance-mobility approach. International Journal of Aerospace and Lightweight structures. 3(1), p135-151,2013 12 Miaoxia Xie, JeongGuon Ih, Taekyoon Kim. A Study on the Acousto-structural interaction of a Thin Cylindrical Pipe Using

Impedance-Mobility Approach. The Acoustical society of Korea. 2012 fall. November. 8-9, Korea.

- 13 Miaoxia Xie, Yueming Li, Hualing Chen. Prediction of High-frequency Vibro-acoustic Coupling in Anechoic Chamber Using Energy Finite Element Method and Energy Boundary Element Method. Computer modeling in engineering and sciences.2067(1), p1-14,2012
- 14 Miaoxia Xie, Yueming Li, et al. Determination of the Mesh Size for Energy Finite Element Models. JSME-CMD International Computational Mechanics Symposium 2012. October.9,Kobe.
- 15 Miaoxia Xie, Hualing Chen, Jiuhui Wu. Transient Energy Density Distribution of a Rod under High-frequency Excitation. Journal of Sound and Vibration. 2011.6.6, 330 (12) . p2701-2706.
- 16 Miaoxia Xie, Hualing Chen, Jiuhui Wu, Fugui Sun. Application of Energy Finite Element Method to High-frequency Structural-acoustic Coupling of an Aircraft Cabin with Truncated Conical Shape. Computer modeling in engineering and sciences. 2010, 1470(1), p1-21.
- 17 Miaoxia Xie, Hualing Chen, Jiuhui Wu,Xinliang Zhao. An Investigation of Reverberation Chamber High-frequency Vibration-acoustic Problem for an Aircraft Cabin. Materials science and engineering. 2011, 179-180(1), p311-315.
- 18 Honglei Liu; Ziyu Zhang; Baotong Li; Miaoxia Xie; Jun Hong; Shuai Zheng. Topology optimization of high frequency vibration problems using the EFEM-based approach.Thin-walled Structures, 2020, 160
- 19 JiangZhe Liu, LinJie Zhang, Hanxin Yang, MiaoXia Xie, XiangTao Shang, Jianxun Zhang. Enhancement of corrosion protection performance of SUS304/Q235B dissimilar metals lap joint through fiber laser. International Journal of Advanced Manufacturing Technology, 2018.1.29, 2018: 1~14.
- 20 Qinglin Bai , Linjie Zhang, Miaoxia Xie, Haixin Yang, Jianxun Zhang.An investigation into the inhomogeneity of the microstructure and mechanical properties of explosive welded H62-brass/Q235B-steel clad plates. International Journal of Advanced Manufacturing Technology. 90(5-8),May,2017 : 1351-1363.
- 21 Jie Ning, Linjie Zhang, Miaoxia Xie, Hanxin Yang , Xianqing Yin, Jianxun Zhang. Microstructure and property inhomogeneity investigations of bonded Zr/Ti/steel trimetallic sheet fabricated by explosive welding. Journal of Alloys and Compounds, vol. 698, pp. 835 - 851, 2016.12.22.
- 22 Jie Ning, Linjie Zhang, Guichuan Jiang, Miaoxia Xie, Xianqing Yin, Jianxun Zhang. Narrow gap multi-pass laser butt welding of explosion welded CP-Ti/Q235B bimetallic sheet by using a copper interlayer. Journal of Alloys and Compounds, vol. 701, pp. 587 - 602, 2017.1.17
- 23 Di Wang , Miaoxia Xie , Yueming Li. High-frequency dynamic analysis of plates in thermal environments based on energy finite element method . Shock and vibration. Vol. 2015, Feb.23, p1-14.
- 24 Di Wang, Miaoxia Xie, Yueming Li. High-frequency vibration analysis of a plate in thermal environment based on energy finite element method . 21st International congress on sound and vibration 2014, ICSV 2014 . V1,

	<p>P794-801. ISBN-13: 9781634392389. 2014, July 17.</p> <p>25 解妙霞, 朱明辉, 姚飞龙, 张鹏, 吕宗阳, 韩俊宏. 基于能量有限元的薄板结构多目标拓扑优化[J]. 应用力学学报, 2022, 已录用。</p> <p>26 解妙霞, 张泽琿, 魏远琪, 高锋伟. 声学黑洞排列组合板结构的减振特性研究[J]. 噪声与振动控制, 2022, 已录用。</p> <p>27 解妙霞, 辛琪珂, 李焱鑫, Khan Muhammad Raza. 预热对选区激光熔化 316L 不锈钢力学性能的影响. 中国激光. 2022. 49 (8) 0802016</p> <p>28 解妙霞, 辛琪珂, 李焱鑫, 张林杰. 选区激光熔化 316L 不锈钢组织性能调控研究. 应用激光. 2023 年, 第 10 期, 已录用.</p> <p>29 解妙霞, 郭瑞峰, 李丽霞, 张林杰. 能量有限元法预示复合材料结构高频动响应研究进展. 力学与实践 38(4). 2016. 8 , p375-381</p> <p>30 解妙霞, 郭瑞峰, 李丽霞. 薄壁液压管道声振耦合分析. 机械强度. 37(5) p812-815.</p> <p>31 解妙霞, 陈花玲, 吴九汇. 能量有限元方法基本理论及其研究新方向. 应用力学学报. 2007, 24(SI), p61-66.</p> <p>32 解妙霞, 陈花玲, 吴九汇. 圆柱壳高频弯曲振动的能量有限元分析. 西安交通大学学报. 2008, 42(9), p1113-1116.</p> <p>33 解妙霞, 陈花玲. 能量有限元方法及其在复杂结构动态响应预示中的应用. 临近空间飞行器技术高峰论坛. 北京. 2009. 11</p> <p>34 解妙霞, 陈花玲, 吴九汇, 王永泉, 李跃明. 高频声辐射问题的能量边界元分析. 临近空间科学与工程. 2011 (1) : 25.</p>
<p>社会兼职</p>	<ol style="list-style-type: none"> 1. 陕西省高新技术企业评审专家 2. 中国振动工程学会会员 3. 陕西省力学学会会员