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**性别：男 导师类型：**

**职称：特聘研究员 学科方向：计算固体力学**

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**个人简介：特聘研究员，本科和博士均毕业于大连理工大学，并于南方科技大学完成博士后研究，博士后出站后进入南昌大学工程建设学院工作。主要研究方向包括：飞行器热防护系统多场耦合分析方法；多种数值方法在力学中的应用，如边界单元法，单元微分法等。目前正在主持国家自然科学基金青年科学基金项目1项，参与了多项国家自然科学基金项目，两项国家“十三五”重大专项项目。在国内外学术期刊上发表了研究论文12篇，获得过1项软件著作权。（数据截止于2024年3月）**

**讲授课程：暂无**

**科研项目/课题**：

1. **国家自然科学基金青年科学基金项目，高精度等参闭合边界单元及其在飞行器热防护结构力学分析中的应用研究，2024.01-2026.12，30万元，主持。**
2. **国家自然科学基金面上项目，基于声学边界元法的机器学习研究及在结构振动噪声分析中的应用，2024.01-2027.12，52万元，参与。**
3. **国家自然科学基金面上项目，随温度变化的功能梯度材料热冲击界面积分边界元法研究，2021.01-2024.12，62万元，参与。**
4. **国家自然科学基金面上项目，边界元与自由元耦合算法研究及其在结构多尺度力热分析中的应用，2021.01-2024.12，63万元，参与。**
5. **国家自然科学基金青年科学基金项目，求解任意多重介质断裂问题的对偶界面积分边界元法研究，2019.01-2021.12，28万元，参与。**

**论文专著：**

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3. **Y.-T. Zheng**, X.-W. Gao, J. Lv, H.-F. Peng. Weak‐form element differential method for solving mechanics and heat conduction problems with abruptly changed boundary conditions [J]. International Journal for Numerical Methods in Engineering, 2020, 121(16), 3722-3741.
4. **Y.-T. Zheng**, X.-W. Gao, H.-F. Peng, B.-B. Xu. The coupled method of multi-domain BEM and element differential method for solving multi-scale problems [J]. Engineering Analysis with Boundary Elements, 2020, 113, 145-155.
5. **Y.-T. Zheng**, X.-W. Gao, S. Liu, K. Yang. Multi-physics coupling analysis of rope-sealed structures with braided ceramic fibres by element differential method. [J] International Journal of Computational Methods and Experimental Measurements, 2021, 9(2): 153-164.
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10. J. Lv, M.-H. Zheng, B.-B. Xu, **Y.-T. Zheng**, X.-W. Gao. Fracture mechanics analysis of functionally graded materials using a mixed collocation element differential method [J]. Engineering Fracture Mechanics, 2021, 244, 107510.