


教师姓名	张锐	性别	男	
出生年月	1973年4月	职位/职称	教授、博导	
获得学位	博士			
联系方式	通讯地址：哈尔滨工业大学			
	邮政编码：150001			
	电 话：15004690886			
	E-mail: ruizhang_ccmst@hit.edu.cn			
所属学科	物理			
研究方向	1、压电学、铁电学、人工晶体学、超声学			
学术兼职				
<b>在研项目：</b>				
国家自然科学基金面上项目：弛豫铁电单晶复参数机电性能及其损耗机理研究				
<b>个人简历：</b>				
<p>张锐，男，教授，博士生导师，2006年度教育部新世纪人才。2000年5月毕业于西安交通大学电子与信息工程学院，获“生物医学工程与仪器”工学博士学位。随后，作为博士后访问学者，至美国宾州州立大学材料研究实验室从事弛豫型铁电单晶 PMN-PT 和 PZN-PT 测试理论与技术方法研究，完成美国海军研究办公室基金与美国健康总署基金等项目。2005年起受聘于理学院物理系。2010年受国家留学基金委支持，赴美国南加州大学从事生物医学传感领域研究。目前研究领域为压电与铁电物理学、超声学、微传感器、换能器等电机器件设计理论与方法。在国内外重要学术刊物发表学术研究论文七十余篇，其中 SCI 收录 37 篇，并已被引用超过五百次。目前承担或已完成国家、教育部及省部级各类研究项目七项。</p>				
<b>论著成果：</b>				
1. Enwei Sun, Rui Zhang(通讯作者), Zhu Wang, Wenwu Cao, “Optical interband				

- transitions in relaxor-based ferroelectric  $0.93\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-}0.07\text{PbTiO}_3$  single crystal,” JOURNAL OF APPLIED PHYSICS, 107(11): 113532, 2010.
2. Yang Xiang, Rui Zhang(通讯作者), Wenwu Cao, “Optimization of piezoelectric properties for [001](c) poled  $0.94\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-}0.06\text{PbTiO}_3$  single crystals,” APPLIED PHYSICS LETTERS, 96(9): 092902, 2010.
  3. Zhu Wang, Rui Zhang(通讯作者), Enwei Sun, Wenwu Cao, “Contributions of domain wall motion to complex electromechanical coefficients of  $0.62\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-}0.38\text{PbTiO}_3$  crystals ,” JOURNAL OF APPLIED PHYSICS, 107(1): 014110, 2010.
  4. Chuanwen Chen, **Rui Zhang**(通讯作者) and Wenwu Cao, “Theoretical study on guided wave propagation in  $(1-x)\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-}x\text{PbTiO}_3$  ( $x=0.29$  and  $0.33$ ) single crystal plates,” JOURNAL OF PHYSICS D-APPLIED PHYSICS, 42(9): 095411, MAY 7 2009.
  5. Chuanwen Chen, **Rui Zhang**(通讯作者), Zhu Wang and Wenwu Cao, “Electromechanical coupling coefficient  $k_{31}$  for arbitrary aspect ratio resonators made of [001] and [011] poled PMN-PT and PZN-PT single crystals,” JOURNAL OF APPLIED PHYSICS, 105(6): 064104, MAR 15 2009.
  6. Yang Xiang, **Rui Zhang**(通讯作者) and Wenwu Cao, “Piezoelectric properties of domain engineered barium titanate single crystals with different volume fractions of domain walls,” JOURNAL OF APPLIED PHYSICS, 106(6): 064102, SEP 15 2009.
  7. Xiuming Li, **Rui Zhang**(通讯作者), Naixing Huang, Tianquan Lü and Wenwu Cao, “Surface Acoustic Wave Propagation in Y- and Z-cut  $0.67\text{PbMgNbO}_3\text{-}0.33\text{PbTiO}_3$  Single Crystals,” JOURNAL OF APPLIED PHYSICS, 106(5): 054110, SEP 1 2009.
  8. Xiuming Li, **Rui Zhang**(通讯作者), Naixing Huang, Tianquan Lü and Wenwu Cao, “Surface acoustic wave propagation properties in  $0.67\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3\text{-}0.33\text{PbTiO}_3$  single crystal poled along [111](c),” APPLIED PHYSICS LETTERS, 95(24): 242906, DEC 14 2009.

9. Zhu Wang, **Rui Zhang**(通讯作者) and Wenwu Cao, "Contributions of domain wall motion to complex electromechanical coefficients of  $0.62\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.38\text{PbTiO}_3$  crystals," JOURNAL OF APPLIED PHYSICS, 107(1): 014110, JAN 1 2010.
10. Enwei Sun, **Rui Zhang**(通讯作者), Xin Zhao and Wenwu Cao, "Electro-Optic Properties of Relaxor Ferroelectric  $0.93\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.07\text{PbTiO}_3$  Single Crystal," ACTA PHOTONICA SINICA, 38(6): 1442-1445, 2009.
11. Xiuming Li, **Rui Zhang**(通讯作者), Naixing Huang, Tianquan Lü, Wenwu Cao, "Surface Acoustic Wave Propagation Properties in  $0.70\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.30\text{PbTiO}_3$  Single Crystal Poled along  $[001]_c$ ," Piezoelectrics & Acoustooptics, 31(6): 782-784, Dec. 1, 2009.
12. Naixing Huang, **Rui Zhang**(通讯作者) and Wenwu Cao, "Electromechanical coupling coefficient of  $0.70\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.30\text{PbTiO}_3$  single crystal resonator with arbitrary aspect ratio," APPLIED PHYSICS LETTERS, 91(12): 122903, SEP 17 2007.
13. Chuanwen Chen, **Rui Zhang**(通讯作者), Hui Chen and Wenwu Cao, "Guided wave propagation in  $0.67\text{Pb}(\text{Mg}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.33\text{PbTiO}_3$  single crystal plate poled along  $[001]_c$ ," APPLIED PHYSICS LETTERS, 91(10): 102907, SEP 3 2007.
14. **Rui Zhang**, Wenwu Cao, Qifa Zhou, JungHyui Cha, K. Kirk Shung, Yuhong Huang, "Acoustic properties of alumina colloidal/polymer nano-composite film on silicon," IEEE TRANSACTIONS ON ULTRASONICS FERROELECTRICS AND FREQUENCY CONTROL, 54(3): 467-469, MAR 2007.
15. **Rui Zhang**, Bei Jiang, Wenhua Jiang and Wenwu Cao, "Complete set of elastic, dielectric, and piezoelectric coefficients of  $0.93\text{Pb}(\text{Zn}_{1/3}\text{Nb}_{2/3})\text{O}_3-0.07\text{PbTiO}_3$  single crystal poled along  $[011]_c$ ," APPLIED PHYSICS LETTERS, 89(24): 242908, DEC 11 2006.
16. **Rui Zhang**, Wenhua Jiang and wenwu Cao, "Frequency dispersion of ultrasonic velocity and attenuation of longitudinal waves propagating in

0.68Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-0.32PbTiO<sub>3</sub> single crystals poled along [001] and [110],” APPLIED PHYSICS LETTERS 87(18): Art. No. 182903, AUG 2005.