

## 个人简历



尹奇异，男，博士，教授，硕士生导师。曾就读于同济大学、四川大学及安徽大学的材料科学与工程专业，长期从事新能源材料、铁电/压电材料、纳米光电催化材料及相关器件的研发，已经公开发表 SCI 检索论文 40 多篇，并担任 *Journal of the American Ceramic Society* 等多个学术期刊审稿人，授权发明专利 6 项，主持或参与完成了国家自然科学基金项目（No.61804039）、安徽省自然科学基金项目（1708085ME112、1808085QE126）、安徽高校自然科学研究项目（KJ2017A533、KJ2013B229）、合肥学院人才科研基金项目（16-17RC09）、合肥学院优秀青年人才支持项目（16YQ04RC）以及横向课题（2021 高性能压电陶瓷的改性制备研究）等多项相关课题的研究。近年研究成果如下：

### 一、发表论文：

- [1] Xianzhao Zhang, Yulin Zhang, **Qiyi Yin\***, et al. Structure and Properties of  $(\text{Bi}_{0.45}\text{Y}_{0.05})\text{Na}_{0.5}(\text{Zr}_{0.85}\text{Sn}_{0.15})\text{O}_3$ -doped  $(\text{K}_{0.5}\text{Na}_{0.5})\text{NbO}_3$  Piezoelectric Ceramics[J], *Journal of Electronic Materials*. 2025, <https://doi.org/10.1007/s11664-024-11691-9>.
- [2] Yulin Zhang, **Qiyi Yin\***, Fei Lin, et al. Study on Structure and Energy Storage Performance of  $\text{Sr}_{0.2}\text{Ba}_{0.8}\text{ZrO}_3$  Regulated  $(\text{Bi}_{0.95}\text{Sm}_{0.05})_{0.5}\text{Na}_{0.5}\text{TiO}_3$  Ceramics[J], *JOM*, 2025, <https://doi.org/10.1007/s11837-024-07077-1>.
- [3] Fan Si, **Qiyi Yin\***, Chen Chen, et al. Effect of  $(\text{Bi}_{0.5}\text{Na}_{0.5})(\text{Zr}_{0.5}\text{Ti}_{0.5})\text{O}_3$  on the Phase Structure and Electrical Properties of  $(\text{K}_{0.5}\text{Na}_{0.5})(\text{Nb}_{0.95}\text{Ta}_{0.05})\text{O}_3$ -Based Ceramics[J], *ECS J. Solid State Sci. Technol.* 2025, 14:014002-014009.
- [4] Chen Chen, **Qiyi Yin\***, Fei Lin, et al. Structural and energy storage properties of  $\text{LiTa}_{0.97}\text{Nb}_{0.03}\text{O}_3$  modulated  $(\text{Ba}_{0.5}\text{Na}_{0.5})_{0.7}\text{Ba}_{0.3}\text{TiO}_3$ -based ceramics[J], *J Mater Sci-Mater El.* 2024, 35:1696-1707.
- [5] Fei Lin, **Qiyi Yin\***, Hao Zu, et al. Relaxation and energy storage properties of  $\text{NaNb}_{0.98}\text{Ta}_{0.02}\text{O}_3$  modulated  $(\text{Na}_{0.5}\text{Bi}_{0.5})_{0.935}\text{Sr}_{0.065}\text{TiO}_3$  ceramics[J], *Ceramics International*. 2024, 50:36034-36041.

- [6] Ruihua Zheng, Fei Lin, **Qiyi Yin\***, et al. The ceramics based on  $(\text{Bi}_{0.5}\text{Li}_{0.5})_{0.9}\text{Sr}_{0.1}\text{ZrO}_3$ -doped  $\text{K}_{0.44}\text{Na}_{0.55}\text{Ag}_{0.01}\text{Nb}_{0.95}\text{Ta}_{0.05}\text{O}_3$  exhibit enhanced structural and electric properties[J], *Applied Physics A-Materials Science & Processing*. 2024, 130:370-381.
- [7] Xianzhao Zhang, **Qiyi Yin\***, Hengwen Cheng, et al. Contribution of  $(\text{Bi}_{0.45}\text{Y}_{0.05})\text{Na}_{0.5}\text{ZrO}_3$  to induced multiphase coexistence and enhanced piezoelectric properties of  $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$  lead-free ceramics[J], *Materials Science & Engineering B*. 2024, 305:117416-117424.
- [8] Ruihua Zheng, **Qiyi Yin\***, Fei Lin, et al. The effect of  $\text{Bi}_{0.5}\text{Li}_{0.5}\text{ZrO}_3$ - $\text{SrSnO}_3$  composite doping on the construction of polymorphic phase boundaries and enhanced electrical properties of  $\text{K}_{0.45}\text{Na}_{0.55}\text{Nb}_{0.965}\text{Sb}_{0.035}\text{O}_3$  piezoelectric ceramics[J], *ECS J. Solid State Sci. Technol.* 2024, 13:043008-043015.
- [9] Fei Lin, **Qiyi Yin\***, Hui Zhang, et al. The study on the increase of relaxation and energy storage properties of  $(\text{Na}_{0.5}\text{Bi}_{0.5})_{0.935}\text{Sr}_{0.065}\text{TiO}_3$  ferroelectric ceramic doped with  $\text{Na}_{0.7}\text{Bi}_{0.08}\text{La}_{0.02}\text{NbO}_3$ [J], *J Mater Sci-Mater El.* 2023, 34:2227-2238.
- [10] Ruihua Zheng, **Qiyi Yin\***, Hengwen Cheng, et al. The effect of  $(\text{Bi}_{0.5}\text{Li}_{0.5})_{0.9}\text{Sr}_{0.1}\text{ZrO}_3$  substitution on the construction of polymorphic phase boundary and high curie temperature of  $\text{K}_{0.45}\text{Na}_{0.55}\text{NbO}_3$  piezoelectric ceramics[J], *J Mater Sci-Mater El.* 2023, 34:954-964.
- [11] **Qiyi Yin**, Xianzhao Zhang, Hengwen Cheng, et al. Study on the structure and properties of  $\text{SrTiO}_3$  modified  $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$  lead-free ceramics with a sintering aid of  $\text{NiO}$ [J], *ECS J. Solid State Sci. Technol.* 2022, 11:123001-123005.
- [12] **Qiyi Yin**, Yu Wang, Quanzheng Zhang, et al. Structure and Properties of  $\text{K}_{0.5}\text{Na}_{0.5}\text{Nb}_{0.96}\text{Sb}_{0.04}\text{O}_3$  Piezoelectric Ceramics doped by  $\text{CuO}$ [J], *Functional Materials Letters*. 2021, 14(6):2151042.
- [13] **Qiyi Yin**, Chengze Wang, Yu Wang, et al. Structure and Properties of  $(\text{K}_{0.5}\text{Na}_{0.5})_{0.98}\text{Ag}_{0.02}\text{Nb}_{0.96}\text{Ta}_{0.04}\text{O}_3$  Piezoelectric Ceramics doped by  $\text{CuO}$ [J], *J Mater Sci-Mater El.* 2018, 29:9268-9274.
- [14] **Qiyi Yin**, Tian Changan, HU Shuting, et al. Structure and Electrical Properties of Piezoelectric Ceramics  $\text{Ba}_{0.9}\text{Ca}_{0.1}\text{Ti}_{1-x}\text{Sn}_x\text{O}_3$  Sintered with  $\text{CeO}_2$  Doping[J]. *MATERIALS REVIEW B*, 2017, 31(11): 26-29.
- [15] **Qiyi Yin**, Zhaoqi Sun, Miao Zhang, et al. Structure and electrical properties of  $\text{K}_{0.5}\text{Na}_{0.5}\text{Nb}_{0.94-x}\text{Sb}_{0.06}\text{Sn}_x\text{O}_3$  lead-free piezoelectric ceramics[J]. *J Alloys Compd*, 2015, 622(1-2): 132-136.
- [16] **Qiyi Yin**, Zhaoqi Sun, Shiwei Shi, et al. Structure and Electrical Properties of Lead-free Piezoelectric Ceramics  $\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ - $\text{Ba}_{0.94}\text{Sr}_{0.06}(\text{Sn}_{0.08}\text{Ti}_{0.92})\text{O}_3$ [J], *Asian J Chem*, 2014, 26(6):1698-1700.
- [17] Tian Changan, Ji Bifa, **Yin Qiyi\***, et al. Preparation and characterization of  $\text{Ce}_{0.8}\text{La}_{0.2-x}\text{Y}_x\text{O}_{1.9}$

as electrolyte for solid oxide fuel cells[J], *J Rare Earth*, 2014, 32(12): 1162-1169.

[18] **Qiyi Yin**, Zhaoqi Sun, Shiwei Shi, et al. Structure and Electrical Properties of  $K_{0.5}Na_{0.5}NbO_3$ - $SrTiO_3$  Lead-free Piezoelectric Ceramics with  $LiSbO_3$  Doping[J], *J Mater Sci-Mater El*. 2013, 24:4258-4262.

[19] **Qiyi Yin**, Zhaoqi Sun, Changan Tian, et al. Crystal Structure and Properties of  $Na_2O$ -modified  $K_{0.47}Na_{0.47}Li_{0.06}Nb_{0.96}Sb_{0.04}O_3$ - $SrTiO_3$  Piezoelectric Ceramics[J], *Asian J Chem*, 2013, 25(10):5655-5657.

[20] Shaobo Li, **Qiyi Yin\***, Changan Tian, et al. Microstructure, Piezoelectric and Dielectric Properties of Lead-free Ceramics  $K_{0.475}Na_{0.475}Li_{0.05}NbO_3$ - $CaZrO_3$ - $CuO$ [J], *Asian J Chem*, 2013, 25(10):5753-5755.

[21] Changan Tian, Junliang Liu, **Qiyi Yin\***, et al. Dielectric and Piezoelectric Properties of  $CuO$ -Doped  $(Na_{0.5}K_{0.5})_{0.94}Li_{0.06}NbO_3$  Lead-Free Ceramics[J], *Asian J Chem*, 2013, 25(10):5744-5746.

[22] **Qiyi Yin**, Ming Ding, Yingying Zhou, et al. Structure and Ferroelectric Properties of  $(Bi_{0.5}Na_{0.5})_{0.9}Ba_{0.07}Sr_{0.03}TiO_3$  Ceramics by Mn Doping[J], *Asian J Chem*, 2012, 24(9):4076-4078.

[23] **Qiyi Yin**, Shuoguo Yuan, Qiang Dong, et al. Microstructure and electrical properties of  $(K, Na, Li)NbO_3$ - $Pb(Zr, Ti)O_3$  piezoelectric ceramics[J]. *J Am Ceram Soc*, 2010, 93(1):167-170.

[24] **Qiyi Yin**, Shuoguo Yuan, Qiang Dong, et al. Effect of  $CuO$  and  $MnO_2$  doping on electrical properties of  $0.92(K_{0.48}Na_{0.54})NbO_3$ - $0.08LiNbO_3$  under low-temperature sintering[J]. *J Alloys Compd*, 2010, 491(1-2): 340-343.

## 二、发明专利:

[1] 高压电性能多元系少铅压电陶瓷及其制备方法, 授权专利号: ZL200810022558.4. 尹奇异, 丁明等.

[2] 一种磷灰石型氧化物电解质粉末的制备方法(CN101186287A), 田长安, 尹奇异等.

[3] 一种具有二维纳米孔隙结构的十二钨酸盐晶体材料及其制备方法, 授权专利号: ZL201910013498.8, 张全争, 梁升, 尹奇异等.

[4] 一种  $MoS_2/TiO_2$  异质结构薄膜光催化剂的制备方法, 授权专利号: ZL201810594547.7, 杨蕾, 孙兆奇, 尹奇异等.

[5] 一种利用含碳高分子工业废弃品制备改性碳复合吸附剂的方法, 授权专利号: ZL202010404590.X, 阳杰, 尹奇异, 杨蕾等.

[6] 一种  $CeO_2$  基复合固体电解质材料及其制备方法, 授权专利号: ZL202010332662.4, 阳杰, 尹奇异, 朱德伦等.