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简历:

董显林, 男, 1965年10月生, 江西南康人, 博士, 研究员, 博士生导师。现任中国科学院上海硅酸盐研究所信息功能材料与器件研究中心主任, 中国科学院无机功能材料与器件中心主任。

1986年毕业于湖南大学化学化工系; 1989年毕业于中国科学院合肥等离子体物理研究所凝聚态物理专业, 获硕士学位; 1992年毕业于中国科学院上海硅酸盐研究所无机非金属材料专业, 获博士学位。1996年作为日本学术振兴会(JSPS)客座研究员在日本筑波大学物理工学系开展合作研究。

长期从事无机功能材料与器件领域的新材料探索、微结构设计及可控制备、物理性能调控与表征、服役行为和应用技术的研究工作。主持了包括国家自然科学基金重点和面上项目、863计划、国家安全重大基础研究项目、军品配套研制项目、中科院应用发展研究重点项目和国防创新基金项目、上海市自然科学基金重点项目和基础研究重点项目、上海市青年科技计划等在内的30多项国家、科学院和上海市科研任务, 组织研制的多种关键功能材料已在我国多种型号任务和航空航天、医疗系统、石油勘探等领域中得到了实际应用, 取得了重大的社会效益和显著的经济效益。在*Appl. Phys. Lett.*, *J. Appl. Phys.*, *J. Am. Ceram. Soc.*等国内外核心刊物发表SCI论文160多篇, 申请国家发明专利50余项, 授权10多项, 获省部级二项。曾获中国科学院青年科学家奖、上海市青年科技优秀启明星和上海市科技系统十大杰出青年等奖励, 享受国务院政府特殊津贴。担任全国工业陶瓷标准化技术委员会功能陶瓷分会副主任、全国电气绝缘材料与绝缘系统评定标准化技术委员会委员、上海市红外与遥感学会副理事长、中国电子行业协会电子陶瓷及器件分会副理事长、上海市物理学会理事、硅酸盐学会理事、中国电子学会电子材料学分会第六届委员会副主任委员、中国电子学会高级会员、《功能材料》编委等。

至今, 已培养研究生23名, 其中1人获国家优秀自费留学生奖学金、1人获德国洪堡奖学金(Humboldt Research Fellowship)、1人获欧盟玛丽-居里奖学金(Marie Curie Fellows)人获中法联合培养双博士学位。

研究方向:

- (1) 铁电陶瓷诱导结构相变特性及其应用;
- (2) 非制冷红外探测器用热释电材料;
- (3) 高性能压电陶瓷材料的优化设计、性能调控与应用技术;
- (4) 微波调谐器件用铁电复合材料可控制备及介电调谐机理;
- (5) 铁电压电薄膜与磁电复合薄膜;
- (6) 压电传感器与换能器设计与制造

职称:

职务:

社会任职:

获奖及荣誉:

代表论著:

1. Ying Chen, Genshui Wang, Shuai Zhang and **Xianlin Dong**, Magnetocapacitance effects of $\text{Pb}_{0.7}\text{Sr}_{0.3}\text{TiO}_3/\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ thin film on Si substrate, *Appl. Phys. Lett.*, 98, C (2011).

Wanfang Liao, Ruihong Liang, Genshui Wang, Fei Cao and [Xianlin Dong](#), Dielectric and tunable properties of columnar $\text{Ba}_{0.6}\text{Sr}_{0.4}\text{TiO}_3$ -MgO composites prepared by plasma sintering, *Appl. Phys. Lett.*, 99, 202905 (2011).

3. F. Ponchel, X. Lei, D. Rémiens, G. Wang and [X. Dong](#), Microwave evaluation of $\text{Pb}_{0.4}\text{Sr}_{0.6}\text{TiO}_3$ thin films prepared by magnetron sputtering on silicon: Performance comparison with $\text{Ba}_{0.3}\text{Sr}_{0.7}\text{TiO}_3$ thin films, *Appl. Phys. Lett.*, 99, 172905 (2011).

4. W. J. Zhang, W. W. Li, X. G. Chen, Z. G. Hu, W. Liu, G. S. Wang, [X. L. Dong](#) and J. H. Chu, Phonon mode and phase transition behaviors of $(1-x)\text{PbSc}_{1/2}\text{Ta}_{1/2}\text{O}_3$ - $x\text{PbHfO}_3$ relaxor ferroelectric ceramics determined by temperature-dependent Raman spectra, *Appl. Phys. Lett.*, 99, 041902 (2011).

5. Lihui Yang, Freddy Ponchel, Genshui Wang, Denis Rémiens, Jean-François L gier, Daniel Chateigner and [Xianlin Dong](#), Microwave properties of epitaxial (111)-oriented $\text{Ba}_{0.6}\text{Sr}_{0.4}\text{TiO}_3$ thin films on Al_2O_3 (0001) up to 40 GHz, *Appl. Phys. Lett.*, 97, 162909 (2010).

6. Hongling Zhang, Xuefeng Chen, Fei Cao, Genshui Wang, [Xianlin Dong](#), Yan Gu, Yusheng Liu, Reversible pyroelectric response in $\text{Pb}_{0.955}\text{La}_{0.03}(\text{Zr}_{0.42}\text{Sn}_{0.40}\text{Ti}_{0.18})\text{O}_3$ ceramic near its phase transition, *Appl. Phys. Lett.*, 94, 252902 (2009).

7. Zhiyong Zhou, Yuchen Li, Lihui Yang and [Xianlin Dong](#), Effect of annealing on dielectric behavior and electrical conduction of W^{6+} doped $\text{Bi}_3\text{TiNbO}_9$ ceramics, *Appl. Phys.*, 90, 212908 (2007).

8. Genshui Wang, Yuanyuan Zhang, Chaoliang Mao, [Xianlin Dong](#) and Junhao Chu, Composition dependence of structural and optical properties for sol-gel derived (100) -c $\text{Ba}_{1-x}\text{Sr}_x\text{TiO}_3$ thin films, *Appl. Phys. Lett.*, 91, 061104 (2007).

9. Jiantong Li, [Xianlin Dong](#), Ying Chen and Yuanyuan Zhang, Space-charge-limited leakage current characteristics influenced by field-dependent permittivity in high dielectric constant and ferroelectric thin films, *Appl. Phys. Lett.*, 88, 212905 (2006).

10. Shuai Zhang, [Xianlin Dong](#), Feng Gao, Ying Chen, Fei Cao, Junyu Zhu, Xiaodong Tang and Genshui Wang, Dielectric Relaxation and Magnetodielectric Response in BSPT thin films and the corresponding model modifications, *J. Appl. Phys.*, 110, 046103 (2011).

11. Feng Gao, [Xianlin Dong](#), Chaoliang Mao, Hongling Zhang, Fei Cao and Genshui Wang, Poling temperature tuned electric-field-induced ferroelectric to antiferroelectric phase transition in $0.89\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3$ - 0.06BaTiO_3 - $0.05\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ ceramics, *J. Appl. Phys.*, 110, 094109 (2011).

12. Gang Yu, [Xianlin Dong](#), Genshui Wang, Fei Cao, Xuefeng Chen and Hengchang Nie, Three-stage evolution of dynamic hysteresis scaling behavior in 37BiScO_3 - 63PbTiO_3 ceramics, *J. Appl. Phys.*, 107, 106102 (2010).

13. Hongling Zhang, Xuefeng Chen, Fei Cao, Genshui Wang, [Xianlin Dong](#), Yan Gu, Hongliang He, and Yusheng Liu, Low thermal hysteresis pyroelectric response near the ferroelectric/antiferroelectric phase transition in $\text{Pb}_{0.97}\text{La}_{0.02}(\text{Zr}_{0.42}\text{Sn}_{0.40}\text{Ti}_{0.18})\text{O}_3$ ceramics, *J. Appl. Phys.*, 108, 086105 (2010).

14. Xuefeng Chen, [Xianlin Dong](#), Honglin Zhang, Ningbo Feng, Hengchang Nie, Fei Cao, Genshui Wang, Yan Gu and Hongliang He, Temperature scaling of dynamic hysteresis in $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ ceramics, *J. Appl. Phys.*, 105, 096104 (2009).

15. Xuefeng Chen, Hongling Zhang, Fei Cao, Genshui Wang, [Xianlin Dong](#), Yan Gu, Hongliang He and Yusheng Liu, Charge-discharge properties of lead zirconate stannate thin films, *J. Appl. Phys.*, 106, 034105 (2009).

16. Ruihong Liang, D. Rémiens, D. Deresmes, D. Troadec, [Xianlin Dong](#), Lihui Yang, R. Desfeux, A. Da Costa, J. F. Blach, Enhancement in nanoscale electrical properties of island fabricated by focused ion beam before crystallization, *J. Appl. Phys.*, 105, 044101 (2009).

17. Yuanyuan Zhang, Genshui Wang, Kefeng Wang, Yu Wang, and [Xianlin Dong](#), The model of electric field dependent dielectric properties for porous ceramics, *J. Appl. Phys.*, 103, 114103 (2008).

18. Zhiyong Zhou, [Xianlin Dong](#), Haixue Yan, Hen Chen and Chaoliang Mao, Doping effects on the electrical conductivity of bismuth layered $\text{Bi}_3\text{TiNbO}_9$ -based ceramics, *J. Appl. Phys.*, 100, 044112 (2006).

19. Lihui Yang, Genshui Wang, [Xianlin Dong](#), Freddy Ponchel, and Denis Rémiens, Microwave properties of $\text{Bi}_{1.5}\text{Zn}_{1.0}\text{Nb}_{1.5}\text{O}_7/\text{Ba}_{0.6}\text{Sr}_{0.4}\text{TiO}_3$ hetero-layered films directly sputtered on Si up to 50 GHz, *J. Am. Ceram. Soc.*, 94, 2262-2265 (2011).

20. Ying Chen, Junyu Zhu, Shuai Zhang, [Xianlin Dong](#), Xiuyun Lei, Xiaodong Tang, Genshui Wang, J. Jiang, Preparation and characterization of Lanthanum strontium manganese films by metal-organic chemical liquid deposition, *J. Am. Ceram. Soc.*, 94, 2783-2787 (2011).

21. Xuefeng Chen, [Xianlin Dong](#), Hongling Zhang, Fei Cao, Genshui Wang, Yan Gu, Hongliang He and Yusheng Liu, Frequency dependence of coercive field in soft PZT bulk ceramics, *J. Am. Ceram. Soc.*, 94, 2262-2265 (2011).

22. Chaoliang Mao, Sheng Cao, Chunhua Yao, Fei Cao, Kui Li, Wei Liu, Genshui Wang, [Xianlin Dong](#), Xu Hu, Chunli Yang, Effect of sintering atmosphere on the microstructure and electrical properties of donor-doped barium strontium calcium titanate pyroelectric ceramics, *J. Am. Ceram. Soc.*, 94, 2003-2006 (2011).

23. Hengchang Nie, [Xianlin Dong](#), Xuefeng Chen, Genshui Wang, Yan Gu, Hongliang He and Yusheng Liu, Formation mechanism of intragranular pores in $\text{Pb}(\text{Zr}_{0.95}\text{Ti}_{0.05})\text{O}_3$ ferroelectric ceramic, *J. Am. Ceram. Soc.*, 95, 223-226 (2012).

24. Wei Liu, Genshui Wang, Sheng Cao, Chaoliang Mao, Chunhua Yao, Fei Cao and [Xianlin Dong](#), The phase transition behavior of $(1-x)\text{Pb}(\text{Sc}_{0.5}\text{Ta}_{0.5})\text{O}_3$ - $(x)\text{PbHfO}_3$ ceramics, *J. Am. Ceram. Soc.*, 94, 2530-2534 (2011).

25. Xiuyun Lei, Denis Rémiens, Freddy Ponchel, Caroline Soyer, Genshui Wang and [Xianlin Dong](#), Optimization of PST thin films grown by sputtering and complete dielectric performance evaluation: an alternative material for tunable devices, *J. Am. Ceram. Soc.*, 94, 4323-4328 (2011).

26. Feng Gao, Xianlin Dong, Chaoliang Mao, Wei Liu, Hongling Zhang, Lihui Yang, Fei Cao, and Genshui Wang, Energy-Storage Properties of $0.89\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3 - 0.06\text{BaTiO}_3 - 0.05\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ Lead-Free Anti-ferroelectric Ceramics, *J. Am. Ceram. Soc.*, 94, 4382 - 4386 (2011).
27. Feng Gao, Xianlin Dong, Chaoliang Mao, Fei Cao, and Genshui Wang, c/a Ratio-Dependent Energy-Storage Density in $(0.9-x)\text{Bi}_{0.5}\text{Na}_{0.5}\text{TiO}_3 - x\text{BaTiO}_3 - 0.1\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ Ceramics, *J. Am. Ceram. Soc.*, 94, 4162 - 4164 (2011).
28. Li Wang, Ruihong Liang, Chaoliang Mao, Min Gao, Gang Du, Fei Cao, Genshui Wang, and Xianlin Dong, Investigation of Phase Structure and Electrical Properties of Doped PMN - PZT Ceramics Prepared by Different Methods, *J. Am. Ceram. Soc.*, 95, 445 - 448 (2012).
29. Hongling Zhang, Xuefeng Chen, Fei Cao, Genshui Wang, Xianlin Dong, Zhiying Hu, Tao Du, Charge-discharge properties of an antiferroelectric ceramics capacitor under electric fields, *J. Am. Ceram. Soc.*, 93, 4015-4017 (2010).
30. Shuai Zhang, Xianlin Dong, Ying Chen, Fei Cao, Yuanyuan Zhang, Genshui Wang, Nossikpendou Sama and Denis Remiens, Growth and Electric Properties of MPB $\text{BiScO}_3/\text{PbTiO}_3$ Thin Films on $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ -Coated Silicon Substrates, *J. Am. Ceram. Soc.*, 93, 1583-1585 (2010).
31. Hengchang Nie, Ningbo Feng, Xuefeng Chen, Genshui Wang, Xianlin Dong, Yan Gu, Hongliang He and Yusheng Liu, Enhanced Ferroelectric Properties of Intragranular-Pd $(\text{Zr}_{0.95}\text{Ti}_{0.05})\text{O}_3$ Ceramic Fabricated with Carbon Nanotubes, *J. Am. Ceram. Soc.*, 93, 642-645 (2010).
32. Wei Liu, Genshui Wang, Sheng Cao, Chaoliang Mao, Fei Cao, Xianlin Dong, The effect of excess PbO on dielectric and pyroelectric properties of lead scandium tantalate *J. Am. Ceram. Soc.*, 93, 2735-2742 (2010).
33. Wei Liu, Genshui Wang, Sheng Cao, Chaoliang Mao, Xianlin Dong, Structural, dielectric and pyroelectric properties of $(1-x)\text{Pb}(\text{Sc}_{0.5}\text{Ta}_{0.5})\text{O}_3 - (x)\text{PbHfO}_3$ ceramics. *J. Am. Ceram. Soc.*, 93, 3023-3026 (2010).
34. Wei Liu, Genshui Wang, Sheng Cao, Chaoliang Mao, Fei Cao, Chunhua Yao, Xianlin Dong, Pyroelectric properties of highly ordered $\text{Pb}(\text{Sc}_{0.5}\text{Ta}_{0.5})\text{O}_3$ ceramics by two-step sintering technique. *J. Am. Ceram. Soc.*, 93, 4030-4032 (2010).