



[首页 \(../index.htm\)](#) | [学院概况 \(../xygk.htm\)](#) | [新闻中心 \(../xwzx.htm\)](#) | [师资队伍 \(../szdw.htm\)](#) | [本科生教育 \(../bksjy.htm\)](#) | [研究生教育 \(../yjsjy.htm\)](#) | [科学研究 \(../kxyj.htm\)](#) | [学生工作 \(../xsgz.htm\)](#) | [党建园地 \(../djyd.htm\)](#) | [校友之家 \(../xyzj.htm\)](#)

当前位置: [首页 \(../index.htm\)](#) >> [师资队伍 \(../szdw.htm\)](#) >> [电气工程系 \(../szdw/dqgcx.htm\)](#) >> 正文

师资队伍

电气工程系

(../szdw/dqgcx.htm)

自动化系 (../szdw/zdhx.htm)

电子信息工程系

(../szdw/dzxxgcx.htm)

通信工程系

(../szdw/txgcx.htm)

现代电工电子技术中心

(../szdw/xddgdzjszx.htm)

电气电子国家级实验教学中心

(../szdw/dqdzgjjsyxzx.htm)

电气与自动化实验中心

(../szdw/dqyzdhsyxzx.htm)

博士后 (../szdw/bsh.htm)

信赢

Date: 2020年08月01日

个人资料:

姓名: 信赢

职称: 教授/博士生导师

学科专业: 电气工程

通讯地址: 天津大学电气自动化与信息工程学院26教学楼E区329室

电子信箱: yingxin@tju.edu.cn

电话/传真: 27400269

主要经历:

- (1) 2014.04至今 天津大学电气自动化与信息工程学院, 超导电力技术, 教授, 博士生导师
- (2) 2001.11-2014.03北京云电英纳超导电力技术有限公司, 超导电力技术, 教授级高级工程师, 博士后导师
- (3) 1991.06-2001.10美国Midwest Superconductivity, Inc., 超导材料, 高级研究员
- (4) 1983.07-1987.09东北大学, 物理, 助教

主要研究方向:

- (1) 高温超导材料
- (2) 超导限流器
- (3) 超导电缆
- (4) 超导磁悬浮轨道交通
- (5) 超导储能

主要科研项目:

- (1) 2017.01-至今 国家自然科学基金面上项目“可再生能源电网超导限流器应用研究(51677131)”, 项目负责人
- (2) 2014.01-至今 国家高技术研究发展计划(863计划)“500 kV大容量超导限流器样机研制(2014AA032705)”, 设备研制组首席专家
- (3) 2009.10-2012.12 国家高技术研究发展计划(863计划)“超导限流器新型高压部件及控制系统(2009AA035403)”, 技术负责人
- (4) 2006.07-2009.12 国家高技术研究发展计划(863计划)“220kV/800A高温超导限流器的研究与开发 (2006AA03Z234)”, 课题组长
- (5) 2005.07-2009.12 天津市科技创新专项“超导限流器 (05FZZDZX00700)”, 项目负责人
- (6) 2005.07-2009.12 云南省科技攻关计划项目“超导限流器的研制和挂网运行 (2005GG07)”, 项目负责人
- (7) 2005.07-2007.12 国家高技术研究发展计划(863计划)“三相交流高温超导电缆系统的进一步完善及并网运行试验 (2005AA306120)”, 课题组长
- (8) 2003.01-2004.12 云南省省院省校合作计划项目“30米高温超导电缆研制及并网运行工程性试验 (2003BABCA05A04 1)”, 项目负责人
- (9) 2002.07-2004.12 北京市重大科技计划项目“30米35kV/2kA高温超导电缆研发及产业化示范 (H020420010210)”, 项目负责人
- (10) 2002.01-2004.12 国家高技术研究发展计划(863计划)“三相交流高温超导电缆的研制及并网运行试验 (2002AA306154、2004AA306110)”, 课题组长

代表性论著、学术著作:

学术论文:

- (1) Y.Xin, Z.Z.Sheng, F.T.Chan, P.C.W.Fung, and K.W.Wong, **Optimum Fabrication Process and Some Relevant Analyses for the Vanadium-Lead Double Substituted 2223 Superconducting Ceramics**, *Solid State Commun.* **76**(1990) 1347.
- (2) Z.Z.Sheng, Y.Xin, and J.M.Meason, and L.A.Burchfield, **Superconductivity above 100K in Ca-free TI-Pb-Sr-Pr-Cu-O S system**, *Physica C* **172**(1990) 43.



- (3) Y.Xin and Z.Z.Sheng, **Study on Zn-, Cd-, or Hg-addition into TlBaCuO**, *J. Appl. Phys.* **68**(1990) 5289.
- (4) Y.Xin, Z.Z.Sheng, F.T.Chan, P.C.W.Fung, and K.W.Wong, **Vanadium? Lead Substituted 2223 Bi-Sr-Ca-Cu-O Superconductors**, *Solid State Commun.* **76**(1990) 1251.
- (5) Xin Fei, D.F.Lu, G.F.Sun, K.W.Wong, F.T.Chan, Z.Z.Sheng, Y.Xin, P.C.W.Fung, C.C.Lam, W.Y.Ching, and Y.Xu, **Double T Transition in Calcium-123 (CaSr₂Cu₃O_y) Super-conductor**, *Solid State Commun.* **76**(1990) 1357.
- (6) Y.Xin, Z.Z.Sheng, D.X.Gu, and D.O.Pederson, **Phase Formation and Superconductivity of 1212-type TlSr₂(Sr_{0.5}R_{0.5})Cu₂O_{7-δ} with R=Sc, Y, and Lanthanides**, *Physica C* **177**(1991) 183.
- (7) Z.Z.Sheng, Y.Xin, J.M.Meason, D.X.Gu, and D.O.Pederson, **Formation and Superconductivity of 1212-type Phase TlSr₂(Sr,Pr)Cu₂O₇ and (Tl,Pb)Sr₂(Sr,-Pr)Cu₂O₇**, *Superconductor Science and Technology* **4**(1991) 212.
- (8) Y.Xin, Y.F.Li, D.X.Gu, D.O.Pederson, and Z.Z.Sheng, **Optimum Preparation and Elemental Addition for Tl-based 2223 Phase Tl₂Ba₂Ca₂Cu₃O_{10-δ}**, *Physica C* **184** (1991) 185.
- (9) Y.Xin, Z.Z.Sheng, and S.Nasrazadani, **Comparison of Pb, Pb-Sb, Pb-V, Pb-Mo, and Pb-W Substituted Bi-Sr-Ca-Cu-O**, *Physica C* **176**(1991) 179.
- (10) Z.Z.Sheng, Y.Xin, and J.M.Meason, **New Tl-based Superconductor TlPbSrRCuO without Ca with Tc above 100K**, *AIP Conference Proceedings* **219**(1991) 500.
- (11) Z.Z.Sheng, Y.Xin, D.X.Gu, J.M.Meason, J.Bennett, D.Ford, and P.O.Pederson, **Semi-conducting TlSr₂RCu₂O₇ (R = rare earth) and Its Superconducting Derivatives**, *Z. Phys. B* **84**(1991) 349.
- (12) Y.Xin, Y.F.Li, D.Ford, D.O.Pederson, and Z.Z.Sheng, **Thermopower and Resistivity of 1212-Type phase TlSr₂(Er_{1-y}Sr_y)Cu₂O_{7-δ}**, *Jpn. J. Appl. Phys.* **30**(1991) L1549.
- (13) Y. Xin, D.Ford, and Z.Z.Sheng, **Computer-controlled Thermoelectric Power Measurement for Bulk High Tc Superconductors**, *Rev. Sci. Instrument* **63**(1992) 2263.
- (14) J.S.Munoz, M.Pont, T.Puig, Z.Z.Sheng, Y.Xin, D.X.Gu, and D.O.Pederson, **Effects of a Bias Field (up to 1T) on the a.c. Susceptibility of Cr_{0.3}Tl₁Ba₂Ca₂Cu₃O_x**, *Cryogenics* **32**(1992) 1042.
- (15) Y.Xin, K.W.Wong, G.F.Sun, and D.F.Lu, **Fluorine Substituted High Tc Cuprate TlSr₂CaCu₂O₇**, *Solid State Commun.* **87** (1993) 1061.
- (16) M.Pont, T.Puig, J.S.Munoz, Z.Z.Sheng, Y.Xin, D.X.Gu, and D.O.Pederson, **Effects of Cr and V Substitution on the Properties of Bulk Tl-based Superconductors**, *Cryogenics* **33**(1993) 91.
- (17) Y.Xin, K.W.Wong, C.X.Fan, Z.Z.Sheng, and F.T.Chan, **Thermoelectric Power of Thallium Based Superconductor Tl₂Ba₂Ca₂-Cu₃O_{10-δ}**, *Phys. Rev. B*, **48**(1993) 557.
- (18) G.F.Sun, K.W.Wong, B.R.Xu, Y.Xin, and D.F.Lu, **Tc Enhancement of HgBa₂Ca₂-Cu₃O_{8+δ} by Tl Substitution**, *Phys. Lett. A* **192**(1994) 122.
- (19) M.Yang, Y.H.Kao, Y.Xin, and K.W.Wong, **Chemical Doping and Intergranular Magnetic-field Effects in Bulk Thallium-based Superconductors**, *Phys. Rev. B* **50**(1994) 13653.
- (20) X.X.Zhang, A.Garcia, J.Tejada, Y.Xin, and K.W.Wong, **Experimental Evidence of Quantum Tunneling of 2D Vortices up to 10K in Bulk Tl₂Ba₂Ca₂-Cu₃O₁₀ Superconductor**, *Physica C* **232**(1994) 99.
- (21) X.X.Zhang, A.Garcia, J.Tejada, Y.Xin, and K.W.Wong, **Quantum Relaxation of Vortices in a Sintered Tl-2223 high-Tc Superconductor**, *Physica C* **235-4**(1994) 2957.
- (22) Z.Q.Yu, L.K.Yu, W.J.Yeh, Y.Xin, and K.W.Wong, **Flux Noise, Vortex Glass Transition, and Irreversibility Line in Ceramic Tl₂Ba₂Ca₂-Cu₃O₁₀ High Tc Superconductors**, *Physica C* **231**(1994) 191.
- (23) C.X.Fan, D.F.Lu, K.W.Wong, Y.Xin, B.Xu, N.S.Alzayed, M.Chester, and D.Knapp, **High Temperature rf SQUID Gradiometer Applied to Non-destructive Testing**, *Cryogenics* **34**(1994) 667.
- (24) Y.Xin, B.R.Xu, S.Nasrazadani, W.S.He, D.F.Lu, G.F.Sun, K.W.Wong, and D.Knapp, **A Systematic Study of the Synthesis of Useful Tl₂Ba₂Ca₂-Cu₃O_{10-δ} Bulk Superconductors**, *J. Mater. Res.* **9**(1994) 1672.
- (25) W.J.Yeh, L.K.Yu, Z.Q.Yu, Y.Xin, K.W.Wong, **Dimensionality Crossover in Tl₂Ba₂Ca₂-Cu₃O_{10-δ} Compounds in Magnetic Field**, *Physica B* **194-196**(1994) 1485.
- (26) Y.Xin, W.S.He, B.R.Xu, G.F.Sun, S.H.Yoo, X.Hu, D.F.Lu, K.W.Wong, and D.Knapp, **Tl₂Ba₂Ca₂-Cu₃O₁₀ Material for Bulk Applications**, *Physica C* **235**(1994) 545.
- (27) D.F.Lu, C.X.Fan, N.Alzayed, K.W.Wong, S.G.Han, J.Z.Ruan, Y.Xin, B.Xu, M.Chester, D.E.Knapp, **Nondestructive Testing of Cracks in Solid Aluminum with High Temperature rf-SQUID**, *Physica C* **235-40**(1994) 3361.
- (28) W.S.He, Y.Xin, N.Alzayed, B.R.Xu, C.X.Fan, and K.W.Wong, **Magnetic Shields Made of High Tc Superconducting Ceramic Tl₂Ba₂Ca₂-Cu₃O₁₀**, *Physica C* **235-40**(1994) 3459.
- (29) N.Alzayed, Y.Xin, W.S.He, C.X.Fan, and K.W.Wong, **Thermal Cycling Effect on Thallium 2223 High-Tc Superconducting Cylindrical Shield**, *Physica C* **235-40**(1994) 3463.
- (30) S.H.Yun, J.Z.Wu, B.W.Kang, A.N.Ray, A.Gapud, Y.Yang, R.Farr, G.F.Sun, Y.Xin, and W.S.He, **Fabrication of C-oriented HgBa₂Ca₂-Cu₃O_{8+δ} Superconducting Thin Films**, *Applied Physics Letters* **67**(1995) 2866.
- (31) P.Dai, B.C.Chakoumakos, F.Sun, K.W.Wong, Y.Xin, and D.F.Lu, **Synthesis and Neutron Powder Diffraction Study of Superconductor HgBa₂Ca₂-Cu₃O_{8+δ} by Tl Substitution**, *Physica C* **243**(1995) 201.
- (32) X.X.Zhang, A.Garcia, J.Tejada, Y.Xin, G.F.Sun, and K.W.Wong, **Magnetic Relaxation and Quantum Tunneling of Vortices in a Polycrystalline Hg_{0.8}Tl_{0.2}Ba₂Ca₂-Cu₃O_{8+δ} Superconductor**, *Physical Rev. B* **52**(1995) 1325.
- (33) A.R.Drews, E.F.Skelton, M.S.Osofsky, S.B.Qadri, D.H.Liebenberg, G.F.Sun, K.W.Wong, and Y.Xin, **Pressure-dependence of Tc in Tl_{0.2}Hg_{0.8}Ba₂Ca₂Cu₃O_x**, *Journal of Superconductivity* **8**(1995) 615.
- (34) Y.Xin, B.R.Xu, W.S.He, G.F.Sun, R.Farr, D.F.Lu, K.W.Wong, and D.Knapp, **Powder Processing of High Temperature Ceramic Superconductor Tl₂Ba₂Ca₂-Cu₃O₁₀**, *J. Electronic Mat.* **24**(1995) 1821.
- (35) B.R.Xu, Y.Xin, G.F.Sun, and K.W.Wong, **Thermoelectric Power of HgBa₂CaCu₂O_{6+δ}, HgBa₂Ca₂Cu₃O_{8+δ}, and (Hg,Tl)Ba₂Ca₂Cu₃O_{8+δ}**, *Thirteenth International Conference on Thermoelectrics* **316**(1995) 96.
- (36) Y.Xin, B.R.Xu, and K.W.Wong, **Effects of Elemental Doping on the Thermoelectric Power of the Thallium Based Superconductor Tl₂Ba₂Ca₂Cu₃O_{10+δ}**, *Thirteenth International Conference on Thermoelectrics* **316**(1995) 119.
- (37) X.X.Zhang, R.H.Yu, J.Tejada, G.F.Sun, Y.Xin, and K.W.Wong, **Magnetic Properties and Giant Magnetoresistance in La_{0.67}Ca_{0.33}Mn₃O_x Bulk Material**, *Appl. Phys. Lett.* **22**(1996) 3191.

- (38) N.S.Alzayed, K.W.Wong, C.X.Fan, Y.Xin, D.F.Lu, and D.E.Knapp, **Magnetic Attenuation by HTC Superconducting Cylinders**, *Chinese Journal of Physics* **34**(1996) 698.
- (39) J.Lluma, X.X.Zhang, J.M.Hernandez, J.Tejada, G.F.Sun, Y.Xin, and K.W.Wong, **Resistance of Ceramic Samples: 2D Localization and Time Dependence**, *Czechoslovak Journal of Physics* **46**(1996) 2493.
- (40) X.X.Zhang, J.Tejada, Y.Xin, G.F.Sun, K.W.Wong, and X.Bohigas, **Magnetocaloric Effect in $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_5$ and $\text{La}_{0.60}\text{Y}_{0.07}\text{Ca}_{0.33}\text{MnO}_5$ Bulk Materials**, *Applied Physics Letters* **69**(1996) 3596.
- (41) G.F.Sun, Y.Xin, D.F.Lu, K.W.Wong, Y.C.Zhang, and J.G.Stevens, **Effects of Fluorine Substitution in Superconducting $\text{Ti}_2\text{Ba}_2\text{CuO}_{6+\delta}$** , *Solid State Communications* **101**(1997) 849.
- (42) S.H.Yoo, K.W.Wong, and Y.Xin, **Thick Film of $\text{HgBa}_2\text{Ca}_2\text{Cu}_3\text{O}_{8+\delta}$ Via the Sol-gel Technique**, *Physica C* **273**(1997) 189.
- (43) S.H.Yoo, K.W.Wong, and Y.Xin, **Thick Films of the T1-based Superconductor Fabricated Via the Sol-gel Technique**, *Physica C* **281**(1997) 55.
- (44) X.Hu, Y.Xin, and K.W.Wong, **Influence of the Mass Density on the Critical Current Density of the Bulk $\text{Ti}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ Material**, *Physica C* **281**(1997) 185.
- (45) Y.Xin, B.R.Xu, and K.W.Wong, **New $\text{Ti}_{2201}(\text{Ti,Cr})_2\text{Sr}_2\text{-CuO}_{6+\delta}$ Phase Material**, *Physica C* **309**(1998) 208.
- (46) X.Hu, Y.Jia, Y.Xin, and K.W.Wong, **$\text{Ti}_2\text{Ba}_2\text{Ca}_2\text{-Cu}_3\text{O}_{10}$ Bulk Samples Prepared by Hot Isostatic Press Method**, *Jpn. J. Appl. Phys.* **38**(1999) 5065.
- (47) Y.Y.Xie, J.Z.Wu, A.A.Gapud, Y.Yu, and Y.Xin, **Synthesis of Hg-1223 Superconductors Using a Cation-exchange process**, *Physica C* **322**(1999) 19.
- (48) B.Hou, H.X.Xi, F.Yuan, Y.Zhang, Y.Xin, Y.F.Bi, S.T.Wu, H.K.Ding, and J.Shi, **The Development of 4m HTS Power Cable**, *Supercond. Sci. Tech.* **17**(2004) S415.
- (49) Y.Xin, B.Hou, Y.F.Bi, K.N.Cao, Y.Zhang, S.T.Wu, H.K.Ding, G.L.Wang, Q.Liu, and Z.H.Han, **China's 30m 35kV/2kV ac HTS Power Cable Project**, *Supercond. Sci. Tech.* **17**(2004) S332.
- (50) Y.Xin, B.Hou, Y.F.Bi, H.X.Xi, Y.Zhang, A.L.Ren, X.C.Yang, Z.H.Han, S.T.Wu, and H.K.Ding, **Introduction of China's First Live Grid Installed HTS Power Cable System**, *IEEE Trans. Appl. Supercon.* **15**(2005) 1814.
- (51) W.Z.Gong, Y.Xin, Y.Zhang, and Y.Wan, **The Reliability and Quench Process of Superconductor Cable**, *IEEE Trans. Appl. Supercon.* **15**(2005) 1831.
- (52) X.C.Xi, B.Hou, Y.F.Bi, X.C.Yang, H.K.Ding, and Y.Xin, **A Prototype 4m, 2kA, AC HTS Power Cable System**, *ICEC 20: Proceeding of the Twentieth International Cryogenic Engineering Conference*(2005) 689.
- (53) B.Hou, Y.F.Bi, S.T.Wu, H.X.Xi, F.Yuan, Y.Xin, Y.Zhang, H.K.Ding, J.Shi, and J.S. Zhang, **A 4m 2kA HTS Power Cable System**, *Plasma Sci. Technol.* **8**(2006) 732.
- (54) H.X.Xi, W.Z.Gong, Y.Zhang, Y.F.Bi, H.K.Ding, H.Wen, B.Hou, and Y.Xin, **China's 33.5m, 35kV/2kA HTS ac Power Cable's Operation in Power Grid**, *Physica C* **18**(2006) 1054.
- (55) Y.Xin, W.Z.Gong, X.Y.Niu, Z.J.Cao, H.X.Xi, J.Y.Zhang, Y.Wang, B.Tian, and B.Hou, **Development of HTS Fault Current Limiters**, *2006 International Conference on Power Systems Technology: POWERCON1- 6*(2006) 569.
- (56) Y.Xin, Z.H.Han, and Z.L.Liao, **Experimental 35kV/121MVA Superconducting Cable System Installed at Puji Substation in Southern China Power Grid**, *IEEE Trans. Elec. and Electron. Engin.* **1**(2006) 8.
- (57) Y.Xin, W.Z.Gong, X.Y.Niu, Z.J.Cao, J.Y.Zhang, B.Tian, H.X.Xi, Y.Wang, H.Hong, Y.Zhang, B.Hou, and X.C.Yang, **Development of Saturated Iron Core HTS Fault Current Limiters**, *IEEE Trans. Appl. Supercon.* **17**(2007) 1760.
- (58) W.Z.Gong, J.Y.Zhang, Z.J.Cao, H.Hong, B.Tian, Y.Wang, J.Z.Wang, X.Y.Niu, J.Qiu, S.H.Wang, and Y.Xin, **HTS dc Bias Coil for 35kV/90MVA Saturated Iron-core Fault Current Limiter**, *Physica C* **468**(2008) 2050.
- (59) S.T.Wu, Y.Wu, Y.T.Song, Y.T.Wu, Y.F.Bi, W.B.Xi, L.Y.Xiao, Q.L.Wang, Y.W.Ma, X.H.Liu, P.X.Zhang, Y.Xin, B.Hou, R.Liu, H.J.Zhang, Z.H.Han, J.Zheng, J.S.Wang, S.Y.Wang, J. Shi, Y.J.Tang, M.Qiu, B.Wei, and Y.F.Tan, **Recent Main Events in Applied Superconductivity in China**, *IEEE Trans. Appl. Supercon.* **19**(2009) 1069.
- (60) Y.Xin, W.Z.Gong, X.Y.Niu, Y.Q. Gao, Q.Q.Guo, L.X.Xiao, Z.J.Cao, H.Hong, A.G.Wu, Z.H.Li, X.M.Hu, B.Tian, J.Y.Zhang, Y.He, Y.Wang, J.Cui, S.Z.Ding, J.Z.Wang, A.L.Ren, and F.Ye, **Manufacturing and Test of a 35kV/90MVA Saturated Iron-core Type Superconductive Fault Current Limiter for Live-Grid Operation**, *IEEE Trans. Appl. Supercon.* **19**(2009) 1934.
- (61) H.Hong, Z.J.Cao, J.Y.Zhang, X.M.Hu, J.Z.Wang, X.Y.Niu, B.Tian, Y.Wang, W.Z.Gong, and Y.Xin, **DC Magnetization System for a 35kV/90MVA Superconducting Saturated Iron-Core Fault Current Limiter**, *IEEE Trans. Appl. Supercon.* **19**(2009) 1851.
- (62) J.Z.Wang, W.Z.Gong, Y.Xin, J.Y.Zhang, X.M.Hu, Y.W.Sun, Y.W.Sun, B.Tian, Y.Wang, H.Hong, X.Y.Niu, Q.Li, and L.F.Zhang, **FEM Simulations in Designing Saturated Iron Core Superconducting Fault Current Limiters**, *2009 International Conference on Applied Superconductivity and Electromagnetic Devices*(2009) 52.
- (63) X.Y.Chen, J.X.Jin, Y.Xin, J.Y.Zhang, W.Z.Gong, and A.L.Ren, **HTS Inductive Energy Controlled Discharging Characteristics and UPS Applications**, *2009 International Conference on Applied Superconductivity and Electromagnetic Devices*(2009) 22.
- (64) X.Y.Chen, J.X.Jin, Y.Xin, and J.Y.Zhang, **Design and Optimization of HTS Magnets for SMES Applications**, *2009 International Conference on Applied Superconductivity and Electromagnetic Devices*(2009) 26.
- (65) Y.Xin, H.Hong, W.Z.Gong, J.Z.Wang, B.Tian, B.Tian, F.Ye, and M.R.Zi, **Superconducting Cable and Superconducting Fault Current Limiter at Puji Substation**, *2009 International Conference on Applied Superconductivity and Electromagnetic Devices*(2009) 388.
- (66) X.Fang, J.Qiu, S.H.Wang, H.L.Xiao, J.Y.Zhang, W.Z.Gong, and Y.Xin, **Transient Electromagnetic Force Analysis of High Temperature Superconducting Fault Limiter**, *Applied Electromagnetic and Mechanics* **13**(2009) 185.
- (67) Y.Xin, W.Z.Gong, and J.Y.Zhang, **A Nontrivial Factor in Determining Current Distribution in an ac HTS Cable-proximity Effect**, *Science China-Technological Sciences* **53**(2010) 922.
- (68) Y.Xin, J.Y.Zhang, and W.Z.Gong, **Voltage Surge Protection Circuit for Superconducting Bias Coil**, *IEEE Trans. Appl. Supercon.* **20**(2010) 1118.
- (69) H.Hong, W.Z.Gong, B.Tian, J.Y.Zhang, X.M.Hu, J.Z.Wang, J.Z.Wang, Y.Wang, L.F.Zhang, Y.W.Sun, T.Q.Wu, and Y.Xin, **Cryogenic System for a 35kV/90MVA Saturated Iron-core Superconducting Fault Current Limiter**, *Transactions of the Cryogenic Engineering Conference-CEC: Advances in Cryogenic Engineering* **1218**(2010) 1395.

- (70) 信赢, 龚伟志, 张敬因, **影响多层交流超导电缆电流分布不可忽略的因素-邻近效应**, 中国科学: 技术科学, 2010, 40:786-793.
- (71) X.Fang, J.Qiu, H.L.Xiao, S.H.Wang, J.Y.Zhang, W.Z.Gong, and Y.Xin, **Transient Electromagnetic Force Analysis of High Temperature Superconducting Fault Limiter**, *International Journal of Applied Electromagnetics and Mechanics* **33**(2010) 503.
- (72) W.Z.Gong, J.Y.Zhang, T.Q.Wu, J.Y.Zhang, and Y.Xin, **Current Limiting Characteristic of Saturated Iron Core SFCLs**, *Journal of Physics: Conference Series* **234**(2010).
- (73) F.Feng, T.M.Qu, C.Gu, Y.Xin, W.Z.Gong, W.Wu, and Z.Han, **Comparative Study on the Critical Current Performance of Bi-2223/Ag and YBCO Wires in Low Magnetic Fields at Liquid Nitrogen Temperature**, *Physica C* **471**(2011) 293.
- (74) Y.W.Sun, W.Z.Gong, J.Z.Wang, H.Hong, B.Tian, and Y.Xin, **Dc Bias System of a 35kV/90MVA Saturated Iron Core SFCL**, *Cryogenics* **51**(2011) 257.
- (75) H.L.Xiao, J.Qiu, S.H.Wang, Q.H.Zhang, W.Z.Gong, Y.Xin, J.G.Zhu, and Y.G.Guo, **Analysis of Transient Overvoltage in 220kV Saturated Core HTS FCL**, *IEEE Trans. Magn.* **47**(2011) 2620.
- (76) Y.Xin, H.Hong, J.Z.Wang, W.Z.Gong, J.Y.Zhang, A.L.Ren, M.R.Zi, Z.Q.Xiong, D.J.Si, and F.Ye, **Performance of the 35kV/90MVA SFCL in Live-Grid Fault Current Limiting Tests**, *IEEE Trans. Appl. Supercon.* **21**(2011) 1294.
- (77) Y.He, C.B.Li, A.G.Wu, X.N.Zhang, Y.Xin, and W.Z.Gong, **Analysis and Simulation of DC-turned off High Temperature Superconducting Fault Current Limiter with Saturated Iron Core**, *Applied Mechanics and Materials* **40-41**(2011) 111.
- (78) X.Y.Niu, W.Z.Gong, B.Tian, Y.W.Sun, J.Y.Zhang, J.B.Cui, H.Hong, and Y.Xin, **Manufacture and Test of the dc Superconducting Coil for a 220kV/300MVA SFCL**, *Physics Procedia* **27**(2012) 388.
- (79) Y.Xin, W.Z.Gong, H. Hong, Y.Q.Gao, X.Y.Niu, J.Y.Zhang, Y.W.Sun, A.L.Ren, H.Z.Wang, L.F.Zhang, Q.Li, Z.Q.Wei, L.Z.Wang, J.B.Cui, G.J.Niu, and Z.Q.Xiong, **Development of a 220kV/300MVA Superconductive Fault Current Limiter**, *Supercond. Sci. Technol.* **25**(2012)105011.
- (80) Y.Xin, W.Z.Gong, Y.W.Sun, J.B.Cui, H. Hong, X.Y.Niu, H.Z.Wang, L.Z.Wang, Q.Li, J.Y.Zhang, Z.Q.Wei, L.Liu, H.Yang, and X.H.Zhu, **Development and Trial Operation of a 220kV/300MVA Superconductive Fault Current Limiter in a Transmission Power Grid**, *IEEE Trans. Appl. Supercon.* **23**(2013) 5602305.
- (81) 毕延芳, 洪辉, 信赢, **高温超导电力应用的低温冷却系统及制冷机**, 中国科学: 技术科学, 2013, 43: 1101-1111.
- (82) Wang, Haizhen, Zhang, Jingyin, Niu, Xiaoye, Tian, Bo, Hong, Hui, Xin, Ying, **Electrical Insulation of HTS Coils in Saturated Iron Core Superconducting Fault Current Limiter**, *IEEE Trans. Appl. Supercon.*, **24**(3) (2014) 1-4.
- (83) Zhang, Jing Y., Jin, Jian X., Chen, Xiao Y., Zhou, Xin, Ren, An L., Gong, Wei Z., Xin, Ying, **Electric Energy Exchange and Applications of Superconducting Magnet in an SMES Device**, *IEEE Trans. Appl. Supercon.*, **24**(24) (2014) 1-4.
- (84) Li, Bin, Li, Chao, Guo, Fengrui, Xin, Ying, Wang, Chuncheng, Pang, Xueyue, **Coordination of Superconductive Fault Current Limiters With Zero-Sequence Current Protection of Transmission Lines**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5602105.
- (85) Li, Bin, Li, Chao, Guo, Fengrui, Xin, Ying, **Overcurrent Protection Coordination in a Power Distribution Network With the Active Superconductive Fault Current Limiter**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5602004.
- (86) Cui, JiBin, Sun, YuWei, Hong, Hui, Niu, XiaoYe, Tian, Bo, Li, Qiang, Zhang, JingYin, Gong, WeiZhi, Xin, Ying, **Study on Field Suppression Unit in DC Excitation System for Saturated Iron-Core Superconducting Fault Current Limiter**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5062304.
- (87) Hong, H., Su, B., Niu, G. J., Cui, J. B., Tian, B., Li, Q., Wang, L. Z., Wang, Z. H., Zhang, K., Xin, Y., **Design, Fabrication, and Operation of the Cryogenic System for a 220 kV/300 MVA Saturated Iron-Core Superconducting Fault Current Limiter**, *IEEE Transactions on Applied Superconductivity*, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 9002204.
- (88) Chen, Xiao Y., Jin, Jian X., Xin, Ying, Guo, You G., Xu, Wei, Wen, Liang, Zhu, Jian G., **Energy Exchange Experiments and Performance Evaluations Using an Equivalent Method for a SMES Prototype**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5701005.
- (89) Chen, Xiao Y., Jin, Jian X., Xin, Y., Shu, Bin, Tang, Chang L., Zhu, Yong P., Sun, Ri M., **Integrated SMES Technology for Modern Power System and Future Smart Grid**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 3801605.
- (90) He, Yi, Du, Chun Y., Li, Chang B., Wu, Ai G., Xin, Ying, **Sensor Fault Diagnosis of Superconducting Fault Current Limiter With Saturated Iron Core Based on SVM**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5602805.
- (91) He, Yi, Jiang, Tao, Du, Chun Y., Li, Chang B., Wu, Ai G., Xin, Ying, **Control System Modeling and Simulation of Superconducting Current Limiter With Saturated Iron Core Controlled by DC Bias Current**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5602606.
- (92) Jin, Jian X., Xin, Ying, Wang, Qiu L., He, Yu S., Cai, Chuan B., Wang, Yin S., Wang, Zan M., **Enabling High-Temperature Superconducting Technologies Toward Practical Applications**, *IEEE Trans. Appl. Supercon.*, **24**(5) (2014) 5400712.
- (93) Jin, Jian Xun, Chen, Xiao Yuan, Wen, Liang, Wang, Shan Chuan, Xin, Ying, **Cryogenic Power Conversion for SMES Application in a Liquid Hydrogen Powered Fuel Cell Electric Vehicle**, *IEEE Trans. Appl. Supercon.*, **25**(1) (2014) 1-11.
- (94) Ziqiang Wei, Ying Xin, Jianxun Jin, and Quan Li, **Optimized Design of Coils and Iron Cores for a Saturated Iron Core Superconducting Fault Current Limiter**, *IEEE Trans. Appl. Supercon.*, **26**(7) (2016) 5603904
- (95) 信赢, **饱和铁心型超导限流器实用性技术研究**.中国科学:技术科学,2017, 47: 1-9.

学术论著:

- (1) 超导电缆.北京: 中国电力出版社, 2013.9
- (2) Chapter 3.3 **Saturated Iron-core Superconductive Fault Current Limiter**, in *Research, Fabrication, and Applications of Bi-2223 HTS wires*, edited by Kenichi Sato, Singapore: WORLD SCIENTIFIC, 2016

专利:

- (1) Method of Fabricating Thallium-containing Ceramic Superconductors, 美国专利, 专利号5,332,721
- (2) Superconductors Having Continuous Ceramic and Elemental Metal Matrices, 美国专利, 专利号5,470,821
- (3) TI-doped HgBaCaCu Superconductors, 美国专利, 专利号5,556,8304

- (4) (Hg or Pb)-Pr-Tl-Sr-Cu-O based superconductors, 美国专利,专利号5,498,594
- (5) High Tc Superconductor Magnetic Shield and Method of Making Same, 美国专利,专利号5,747,425
- (6) Method of Fabricating Thin Film Superconducting Materials, 美国专利,专利号5,807,809
- (7) 具有双层冷却通道结构的热绝缘高温超导电缆及其冷却方法, 发明专利, 专利号ZL03120016.8
- (8) 高温超导电磁屏蔽及制作其中超导屏蔽层的方法, 发明专利, 专利号ZL200310114123.X
- (9) 组合式超导电缆, 发明专利, 专利号ZL200410056513.0
- (10) 超导饱和铁心故障限流器, 发明专利, 专利号ZL200310123539.8
- (11) 混合式超导输电电缆, 发明专利, 专利号ZL200410007498.0
- (12) 带短路环的超导故障限流器, 发明专利, 专利号ZL200510009149.7
- (13) 快速限流型超导故障限流器, 发明专利, 专利号ZL200410058695.5
- (14) 高温超导线材绝缘包绕装置, 发明专利, 专利号ZL200920108668.2
- (15) 紧凑型铁心结构, 发明专利, 专利号ZL200710097089.8
- (16) 一种带有保护电路的超导绕组, 发明专利, 专利号ZL200710100160.3
- (17) 具有直流控制系统的饱和铁心型超导限流器及其控制方法, 发明专利, 专利号ZL200810084283.7
- (18) 饱和铁心型超导故障限流器及该限流器的控制方法 (Core-saturated superconductive fault current limiter and control method of the fault current limiter), PCT专利, 专利申请号PCT/CN2008/000792, 美国授权号: US8582255B2、欧盟授权号: EP2138088B1、日本授权号: JP5102872、韩国专利号: 10-1108664
- (19) 用于工作在磁饱和区的不等截面铁心结构, 发明专利, 专利号ZL200710097088.3
- (20) 一种冷绝缘超导电缆主绝缘的消缺方法及实现该方法的系统结构, 发明专利, 专利号ZL200910241995.X
- (21) 具有永磁材料辅助励磁的铁心结构, 发明专利, 专利号ZL201010595020.X
- (22) 一种新型超导直流限流器, 发明专利, 申请号: 201610817462.1

主要讲授课程:

- (1) 超导科学与技术入门 (博士生)

主要学术成就、奖励及荣誉:

- (1) 云南省科学技术一等奖, 排名第一, 2007
- (2) 中国南方电网公司科学技术一等奖, 排名第一, 2007
- (3) 中国电力科学技术一等奖, 排名第一, 2007
- (4) 云南省科学技术三等奖, 排名第二, 2011
- (5) 中国南方电网公司科学技术一等奖, 排名第二, 2011
- (6) 中国电力科学技术三等奖, 排名第一, 2012
- (7) 国家能源科技进步一等奖, 排名第一, 2012
- (8) 北京市科学技术一等奖, 排名第一, 2015

其它奖励及荣誉

- (1) 享受国务院政府特殊津贴
- (2) 北京经济技术开发区第二届博大奖

其他 (社会兼职等) :

- (1) 2015- 《Superconductor Science and Technology》执行编委
- (2) 2004- 《新材料产业》指导委员会委员
- (3) 2005- 《低温与超导》杂志编委会委员
- (4) 2008- IEC-TC90 (超导标准) 工作组成员
- (5) 2007- IEEE成员
- (6) 2007- 国家标准委员会超导分委会委员
- (7) 2012- 中国电机学会超导与磁流体发电专业委员会委员
- (8) 2016- 中国电工技术学会超导应用技术专业委员会

地址: 天津市南开区卫津路92号 天津大学 电气自动化与信息工程学院 邮编: 300072 电话: (022)27406272 E-mail: auto@tju.edu.cn

津ICP备05004358号 津教备0316号 天津大学 电气自动化与信息工程学院 版权所有