Refereed Publications for ISEM 2006

Book Chapters

Journal Articles

1. **J.-H. Ahn, Y.-J. Kim, and G.X. Wang,** "Electrochemical Properties of Carbon Nanotube-Dispersed PEO-Li_x Electrolytes", *Metals and Materials International*, 12, 69-73 (2006). (IF: 1.604)

2. **J.-H. Ahn, Y.-J. Kim, G.X. Wang, and H.K. Liu,** "Li storage properties of Ag and SnO_2 nanopowders synthesized from reverse micelles", *Journal of Metastable and Nanocrystalline Materials*, 26, 1-7 (2005).

3. **G.A. Alvarez, I. Iguchi, X. Wang, S.X. Dou, and Q. Yao, "**Spectroscopic measurements of Zeeman splitting of the density of states in high temperature superconducting tunnelling junctions", *Journal of Applied Physics,* 99, 08C912 (2006) (IF: 2.498).

4. **G.A. Alvarez, I. Iguchi, X.L. Wang, S.X. Dou, and Q. Yao, "**Quantum effects in small-capacitance high temperature superconducting tunnelling junctions", *Journal of Applied Physics,* 99, 08M514 (2006) (IF: 2.498).

5. **J. Z. Cai, L. Lu, W. J. Kong, H. W. Zhu, C. Zhang, B. Q. Wei, D. H. Wu, and F. Liu,** "Pressure-Induced Transition in Magnetoresistance of Single-Walled Carbon Nanotubes", *Phys. Rev. Lett.,* 97, 026402 (2006) (IF: 7.489).

6. **R. Chen, M. Zhu, Y. Li, W. Li, H. Jin, and S.X. Dou, "**Effect of pulsed magnetic field on critical current in carbon-nanotube-doped MgB2 wires", *Acta Physica Sinica,* 55, 4878-4882 (2006) (IF: 1.256).

7. **F. Cheng, W. Tang, C. Li, J. Chen, H.K. Liu, P. Shen, and S.X. Dou, "**Conducting poly(aniline) nanotubes and nanofibres: Controlled synthesis and application in lithium/poly(aniline) rechargeable batteries", *Chemistry - A European Journal*, 12, 3082-3088 (2006) (IF: 4.907).

8. **Z.X. Cheng, C.V. Kannan, K. Ozawa, H. Kimura, and X.L. Wang**, "Orientation dependent ferroelectric properties in samarium doped bismuth titanate thin films grown by the pulsed-laser-ablation method", *Applied Physics Letters*, 89, 032901 (2006) (IF: 4.127).

9. **Z.X. Cheng, X.L. Wang, C.V. Kannan, K. Ozawa, H.K.T. Nishida, S. Zhang, and T.R. Shrout,** "Enhanced electrical polarization and ferromagnetic moment in a multiferroic $BiFeO_3/Bi_{3.25}Sm_{0.75}Ti_{2.98}V$).02012 double-layered thin film", *Applied Physics Letters*, 88, 132909 (2006) (IF: 4.127).

10. **S.X. Dou, E. Collings, O.V. Shcherbakova, and A. Shcherbakov, "**Aluminium-stabilised magnesium diobride - a new light-weight superconductor", *Supercond. Sci. Technol.,* 19, 333-337 (2006) (IF: 1.896).

11. **S.X. Dou, W.K. Yeoh, O. Shcherbakova, J. Horvat, J.H. Kim, A.V. Pan, D. Wexler, Y. Li, W.X. Li, Z.M. Ren, P. Munroe, and J.Z. Cui,** "Magnetic field processing to enhance critical current densities of MgB_2 superconductors", *Appl. Phys Lett.*, 89, 202504 (2006) (IF: 4.127).

12. **S.X. Dou, W.K. Yeoh, O.V. Shcherbakova, D. Wexler, Y. Li, W.X. Li, Z. Ren, P. Munroe, S. Chen, K. Tan, B. Glowacki, and J. MacManus-Driscoll,** "Alignment of carbon nanotube additives for enhancing the magnesium diboride superconductors' performance", *Advanced Materials,* 18, 785-788 (2006) (IF 9.107).

13. **D. V. Evtushinsky, A. A. Kordyuk, S. V. Borisenko, V. B. Zabolotnyy, M. Knupfer, J. Fink, B. Büchner, A. V. Pan, A. Erb, C. T. Lin, H. Berger**, Unadulterated spectral function of low-energy quasiparticles in $Bi_2Sr_2CaCu_2O_{8+\Delta}$, *Phys. Rev. B* **74**, 172509, 4 pages (2006). (IF: 3.185)

14. **F. Gao, R.A. Lewis, X.L. Wang, and S.X. Dou,** "Far infrared spectra of $La_{1-x}Ca_xMn_{0.9}Li_{0.1}0_3$", *Journal of Physics: Conference Series*, 28, 143-146 (2006).

15. **Z.P. Guo, Z.G. Huang, K. Konstantinov, H.K. Liu, and S.X. Dou,** "Electrochemical Hydrogen storage properties of nonstoichiometric amorphous $MgNi_{1+x}$-Carbon composites (x = 0.05-0.3)", *International Journal of Hydrogen Energ*y, 31, 2032-2039 (2006) (IF 1.848).

16. **Z.P. Guo, Z.G. Huang, Z.W. Zhao, X. Menard, and H.K. Liu,** "Enhanced electrochemical properties of nonstoichiometric amorphous $Mg_2Ni_{1.3}$ Electrodes", *Journal of Applied Electrochemistry*, 36, 11 (2006) (IF: 1.282).

17. **Z.P. Guo, D.Z. Jia, L. Yuan, and H.K. Liu,** "Optimizing synthesis of Silicon / disordered Carbon composites for use as anode materials in Lithium ion batteries", *Journal of Power Sources*, 159, 332 (2006) (IF: 2.770).

18. **Z.P. Guo, S.H. Ng, J.Z. Wang, Z.G. Huang, H.K. Liu, C.O. Too, and G.G. Wallace,** "Electrochemical Hydrogen storage in single-walled Carbon nanotube paper", *Journal of Nanoscience and Nanotechnology*, 6, 713-718 (2006). (IF: 1.932).

19. **Z.G. Huang, Z.P. Guo, D. Wexler, A. Calka, C. Lukey, and H.K. Liu,** "Effects of iron oxide (Fe_2O_4, Fe_3O_4) on hydrogen storage property of Mg-based composites", *Journal of Alloys and Compounds*, 422, 299 (2006) (IF: 1.562).

20. **Z.G. Huang, Z.P. Guo, D. Wexler, K. Konstantinov, and H.K. Liu**, "Thermal stability and hydrogen storage property of $Mg_{1.9}Cu_{0.1}Ni_x$ (x = 1.8, 1.9, 2.0 and 2.1) alloys", *Journal of Alloys and Compounds*, 426, 335-340 (2006) (IF: 1.562).

21. **S. Keshavarzi, J. Horvat, A.V. Pan, M.J. Qin, S.X. Dou, X. Yao, and P. Munroe**, "An alternative method for determination of the lock-in angle in twinned superconductors", *J. Appl. Phys.*, 99, 043904 (2006) (IF: 2.498).

22. **J.H. Kim, W.K. Yeoh, M.J. Qin, X. Xu, S.X. Dou, P. Munroe, H. Kumakura, T. Nakane, and C.H. Jiang,** "Enhancement of in-field J_c in MgB_2/Fe wire using single and multiwalled carbon nanotube", *Applied Physics Letters*, 89, 122510-1 (2006) (IF: 4.127).

23. **J.H. Kim, S. Zhou, M.S.A. Hossain, A.V. Pan, and S.X. Dou,** "Carbohydrate doping to enhance electromagnetic properties of MgB_2 superconductors", *Applied Physics Letters*, 89, 142505 (2006) (IF: 4.127).

24. **J.H. Kim, W.K. Yeoh, M.J. Qin, X. Xu, and S.X. Dou**, "The doping effect of multiwall carbon nanotube on MgB_2/Fe superconductor wire", *Journal of Applied Physics*, 100, 013908-1 (2006) (IF: 2.498).

25. **J.H. Kim, W.K. Yeoh, X. Xu. S.X. Dou, P. Munroe, M. Rindfleisch, and M. Tomsic,** "Superconductivity of MgB_2 with embedded multiwall carbon nanotube", *Physica C: Superconductivity and its Applications*, 449, 133-138 (2006) (IF: 0.948).

26. **K. Konstantinov, S.H. Ng, J. Wang, G.X. Wang, D. Wexler, and H.K. Liu,** "Nanostructured PbO materials obtained in situ by spray solution technique for Li-ion batteries", *Journal of Power Sources,* 159, 241-244 (2006) (IF: 2.770).

27. **A. Kordyuk, S. V. Borisenko, V. B. Zabolotnyy, J. Geck, M. Knupfer, J. Fink, B. Buchner, C.T. Lin, B. Keimer, H. Berger, A.V. Pan, S. Komiya, and Y. Ando**, Constituents of the quasiparticle spectrum along the nodal direction of high-T_c cuprates, *Phys. Rev. Lett.*, 97, 017002 (2006) (IF: 7.489).

28. **Z.J. Lao, K. Konstantinov, Y. Tournayre, S.H. Ng, G.X. Wang, and H.K. Liu,** "Synthesis of vanadium pentoxide powders with enhanced surface-area for electrochemical capacitors", *Journal of Power Sources,* 162, 1451-1454 (2006) (IF: 2.770).

29. **R. A. Lewis, P. E. Simmonds, and Y. J. Wang,** "Magnetospectroscopy to 30T of donor states in InP", *Physica B : Physics of Condensed Matter*, 376-377, 622-625 (2006) (IF: 0.796).

30. **R.A. Lewis, M.L. Smith, R. Mendis, and R.E.M. Vickers,** "THz generation in InAs", *Physica B: Physics of Condensed Matter*, 376-377, 618-621 (2006) (IF: 0.796).

31. **A.H. Li, X.L. Wang, H.K. Liu, M. Ionescu, S.X. Dou, P. Xuan, and E.W. Collings**, "Effect of substrate surface modification using Ag nano-dots on the improvement of J_c and microstructures in $YBa_2Cu_3O_7$ thin films grown on $LaAlO_3$ (100) by pulsed laser deposition", *J. Electroceram.* 16, 605-609 (2006).

32. **E.B. Li, X.L. Wang, and C. Zhang**, Fiber-optic temperature sensor based on interference of selective higher-order modes, *Appl. Phys. Lett.*, 89**,** 091119 (2006) (IF: 4.127).

33. **Z.W. Lin, J.G. Zhu, Y.G. Guo, X.L. Wang, and S.Y. Ding,** „Three-dimensional hysteresis of soft magnetic composite", *Journal of Applied Physics*, 99, 8D909-1-3 (2006).

34. **H.K. Liu, G.X. Wang, Z.P. Guo, J. Wang, and K. Konstantinov, "**Nanomaterials for Lithium-ion rechargeable batteries", *Journal of Nanoscience and Nanotechnology,* 6**,** 1-15 (2006) (IF: 1.932).

35. **J.-F. Liu, W.-J. Deng, K. Xia, C. Zhang, and Z. Ma**, "Transport of spin-polarized electrons in a magnetic superlattice", *Phys. Rev. B*, 73, 155309 (2006) (IF: 3.185).

36. **P. Lyu and C. Zhang**, "Thermionic cooling in cylindrical semiconductor nanostructures", *Appl. Phys. Lett.*, 89**,** 153125 (2006) [Selected for October 23, 2006 issue of *Virtual Journal of Nanoscale Science & Technology*] (IF: 4.127).

37. **R. Mendis**, "Nature of subpicosecond terahertz pulse propagation in practical dielectric-filled parallel-plate waveguides", *Optics Letters*, 31, 2643 (2006) (IF: 3.599).

38. **R Mendis**, "Guided-wave THz time-domain spectroscopy of highly doped silicon using parallel-plate waveguides", *Electronics Letters*, 42, 26 (2006) (IF: 1.016).

39. **S.A. Needham, A. Calka, G.X. Wang, G. Peleckis, and H.K. Liu,** "Synthesis of functional oxides by a novel mechanical milling – electric discharge method", *Journal of Mat. Chem.*, 16, 4488-4493, DOI: 10.1039/B608437K (2006) (IF: 3.688).

40. **S. A. Needham, A. Calka, G. X. Wang, A. Mosbah, and H. K. Liu**, "A new rapid synthesis technique for electrochemically active materials used in energy storage applications", *Electrochemistry Communications*, 8, 434-438 (2006) (IF: 3.388).

41. **S.A. Needham, G.X. Wang, and H.K. Liu,** "Synthesis of NiO nanotubes for use as negative electrodes in Li-ion batteries", *Journal of Power Sources*, 159, 254-257 (2006) (IF: 2.770).

42. **S.A. Needham, G.X. Wang, K. Konstantinov, Y. Tournayre, Z. Lao, and H.K. Liu**, "Electrochemical performance of Co_3O_4-C anode materials" *Electrochemical and Solid-State Letters*, 9, A315-A319 (2006) (IF: 1.970).

43. **S.A. Needham, G.X. Wang, H.K. Liu, and L. Yang,** "Nickel oxide nanotubes: Synthesis and electrochemical performance for use in Li-ion batteries", *Journal of Nanoscience and Nanotechnology*, 6, 77-81 (2006) (IF: 1.932).

44. **S.H. Ng, J. Wang, D. Wexler, K. Konstantinov, Z.P. Guo, and H.K. Liu, "**Highly reversible lithium storage in spheroidal carbon-coated silicon nanocomposites as anodes for lithium-ion batteries", *Angewandte Chemie International Edition*, 45, 6896-6899 (2006) (IF 9.596).

45. **S.H. Ng, J. Wang, K. Konstantinov, D. Wexler, J. Chen, and H.K. Liu,** "Spray pyrolyzed PbO-carbon nanocomposites as anode for lithium-ion batteries", *Journal of the Electrochemical Society*, 153, A787-A793 (2006) (IF: 2.190).

46. **M.F. O'Dwyer, T.E. Humphrey, R.A. Lewis, and C. Zhang,** "Low thermal conductivity short-period superlattice thermionic devices", *Journal of Physics D*, 39, 4153 (2006) (IF: 1.957).

47. **M.F. O'Dwyer, T.E. Humphrey, and H. Linke,** "Concept study for a high-efficiency nanowire-based thermoelectric", *Nanotechnology*, 17, S338 (2006) (IF: 2.993).

48. **A.V. Pan and S.X. Dou**, "Comparison of small-field behaviour in MgB_2 low and high temperature superconductors", *Physical Review B,* 73, 052506 (2006) (IF: 3.185).

49. **A.V. Pan, S. Pysarenko, and S.X. Dou, "**Drastic improvement of surface structure and current-carrying ability in $YBa_2Cu_30_7$ films by introducing multilayered structure", *Applied Physics Letters,* 88, 232506 (2006) (IF: 4.127).

50. **A.V. Pan, S. Pysarenko, M. Roussel, G.A. Alvarez, and S.X. Dou, "**Structure, pinning and supercurrent in $YBa_2Cu_30_7$ films and $ReBa_2Cu_30_7$ multilayers", *Journal of Physics: Conference Series,* 43, 063 251-254 (2006).

51. **V. M. Pan, Yu. Cherpak, V. A. Komashko, S. A. Pozigun, C. G. Tretiatchenko, A. V. Semenov, E. A. Pashitskii, and A. V. Pan**, Supercurrent Transport in $YBa_2Cu_3O_7$ Epitaxial Thin Films in DC Magnetic Field, *Phys. Rev. B* **73**, 052508, 11 pages (2006). (IF: 3.185)

52. **V. M. Pan, S. A. Pozigun, Yu. V. Cherpak, V. A. Komashko, A. L. Kasatkin, E. A. Pashitskii, A. V. Semenov, A. V. Pan**, Peak-effect and angular hysteresis in $J_c(H, \theta)$ dependencies for $YBa_2Cu_3O_{7-\delta}$ epitaxial films, *J. Phys.: Conf. Ser.* **43**, 674-677 (2006).

53. **M.S. Park, G.X. Wang, H.K. Liu, and S.X. Dou**, "Electrochemical properties of Si thin film prepared by pulsed laser deposition for lithium ion micro-batteries", *Electrochimica Acta*, 51, 5246-5249 (2006) (IF: 2.453).

54. **M.S. Park, Y.J. Lee, Y.S. Han, and J.Y. Lee**, "Effects of mechanical milling and arc melting processes on the electrochemical performance of Si-based composite materials", *Materials Letters*, 60, 3079-3093 (2006) (IF: 1.299).

55. **G. Peleckis, X.L. Wang, and S.X. Dou,** "Room-temperature ferromagnetism in Mn and Fe co-doped In_2O_3", *Applied Physics Letters*, 88, 132507 (2006) (IF: 4.127).

56. **G. Peleckis, X.L. Wang, and S.X. Dou,** "High temperature ferromagnetism in Ni-doped In_2O_3 and indium-tin oxide", *Applied Physics Letters*, 89, 022501 (2006) (IF: 4.127).

57. **G. Peleckis, X.L. Wang, and S.X. Dou,** "Ferromagnetism in Mn-doped In_2O_3 oxide", *Journal of Magnetic Materials*, 301, 308 (2006) (IF: 0.985).

58. **G. Peleckis, X.L. Wang, and S.X. Dou,** "Magnetic and transport properties of transition metal doped polycrystalline In_2O_3." *IEEE Transactions on Magnetics*, 42, 2703-5 (2006).

59. **A. Polyanskii, X.L. Wang, Q. Yao, S. X. Dou, Z. Lin, and J. Zhu, "**Magneto-optical imaging of the magnetization process in colossal magnetoresistive lanthanum manganite", *Journal of Applied Physics,* 99, 08A704 (2006) (IF: 2.498).

60. **T.A. Prikhna, W. Gawalek, Y.M. Savchuk, N.V. Sergienko, V.E. Moshchil, M. Wendt, M. Zeisberger, T. Habisreuther, V.B. Sverdun, S.X. Dou, S.N. Dub, V.S. Melnikov, C. Schmidt, J. Dellith, and P.A. Nagorny,** "Formation of magnesium diboride-based materials with high critical currents and mechanical characteristics by high pressure synthesis", *Journal of Physics : Conference Series*, 43, 496-499 (2006).

61. **M. Roussel, A.V. Pan, S. Zhou, and S.X. Dou, "**Influence of the iron sheath on the local supercurrent distribution in MgB2 wires", *Journal of Physics: Conference Series,* 43, 024 95-98 (2006).

62. **O.V. Shcherbakova, S.X. Dou, S. Soltanian, D. Wexler, M. Bhatia, M. Sumption, and E.W. Collings**, "The effect of doping level and sintering temperature on $J_c(H)$ performance in nano-SiC doped and pure MgB_2 wires", *Journal of Applied Physics*, 99, 08M510-1 (2006) (IF: 2.498).

63. **P.Z. Shen, D.Z. Jia, Y.D. Huang, L. Liu, and Z.P. Guo,** "$LiMn_2O_4$ cathode materials synthesized by the cellulose-citric acid method for Lithium ion batteries*",* *Journal of Power Sources*, 158, 608 (2006) (IF 2.770).

64. **P.Z. Shen, Y.D. Huang, L. Liu, D.Z. Jia, and Z.P. Guo,** "Synthesis and electrochemical performance of $LiCr_xMn_{2-x}O_4$ (x = 0, 0.02, 0.05, 0.08, 0.10) powders by ultrasonic co-precipitation", *Journal of Solid State Electrochemistry*, 10, 929 (2006) (IF: 1.158).

65. **D. Shi, S. X. Dou, J. Kim, T. Silver, R. Ko, K. Song, C. Park, "**YBCO coated conductor using biaxially textured Ni-0.1%Mn substrate", *Physica C,* 434, 79-84 (2006) (IF: 0.948).

66. **G.X. Wang, M.S. Park, D. Wexler, J. Chen, and H.K. Liu,** "Synthesis and characterisation of one dimensional CdSe nanostructures", *Applied Physics Letters*, 88, 193115 (2006) (IF: 4.127).

67. **G.X. Wang, S. Bewlay, S.A. Needham, H.K. Liu, R.S. Liu, V.A. Drozd, J.-F. Lee, and J.M. Chen,** "Synthesis and characterization of $LiFePO_4$ and $LiTi_{0.01}Fe_{0.99}PO_4$

cathode materials", *Journal of the Electrochemical Society*, 153, A25-A31 (2006) (IF: 2.120).

68. **G.X. Wang, S. Needham, J. Yao, J.Z. Wang, R.S. Liu and H.K. Liu,** "A study on $LiFePo_4$ and its doped derivatives as cathode materials for lithium-ion batteries", *Journal of Power Sources*, 159, 282-286 (2006) (IF: 2.770).

69. **G.X. Wang, J. Yao, H.K. Liu, S.X. Dou, and J.-H. Ahn,** "Growth and lithium storage properties of vertically aligned carbon nanotubes", *Metals and Materials International*, 12, 413-416 (2006). (IF: 1.604)

70. **J.Z. Wang, S.H. Ng, G.X. Wang, J. Chen, L. Zhao, Y. Chen, and H.K. Liu,** "Synthesis and characterisation of nanosize cobalt sulphide for rechargeable lithium batteries", *Journal of Power Sources*, 159, 287-290 (2006) (IF: 2.770).

71. **J.Z. Wang, J. Chen, K. Konstantinov, L. Zhao, S.H. Ng, G.X. Wang, Z.P. Guo, and H.K. Liu,** "Sulphur-polypyrrole composite positive electrode materials for rechargeable lithium batteries", *Electrochimica Acta*, 51, 4634-4638 (2006) (IF: 2.453).

72. **J.Z. Wang, G.X. Wang, L. Yang, S.H. Ng, and H.K. Liu,** "An investigation on electrochemical behaviour of nanosize zinc sulphide electrode in lithium-ion cells", *Journal of Solid State Electrochemistry*, 10, 250-254 (2006) (IF: 1.158).

73. **J. Chen, J. Wang, C. Wang, C.O. Too, G.G. Wallace**, "Lithium/Polymer Battery based on Polybithiophene as Cathode Materials" J. Power Sources. 159 (2006) 708.

74. **R.Y. Wang, D.Z. Jia, L. Zhang, and Z.P. Guo,** "Rapid synthesis of amino acid polyoxometalate nanotubes by one-step solid-state chemical reaction at room temperature", *Advanced Functional Materials*, 16, 687 (2006) (IF 6.770).

75. **W. Xu, Z. Zeng, F. Lu, and C. Zhang**, "Fast-electron optical spectrum of a two-dimensional electron gas in the presence of the Rashba effect", *Physica E*, 34, 272 (2006) (IF: 0.946).

76. **X. Xu, M J. Qin, K. Konstantinov, D. dos Santos, W.K. Yeoh, J.H. Kim, and S.X. Dou,** "Effect of boron powder purity on superconducting properties of MgB_2", *Supercond. Sci. Technol.*, 19, 466-469 (2006) (IF: 1.896).

77. **X. Xu, J.H. Kim, W.K. Yeoh, Y. Zhang, S.X. Dou,** "Improved J_c of MgB_2 superconductor by ball milling using different media", *Supercond. Sci. Technol.*, 19, L47-L50 (2006) (IF: 1.896).

78. **C. H. Yang, A. Wright, F. Gao, C. Zhang, Z. Zeng, and W. Xu**, "Two colour plasmon excitation in an electron-hole bilayer structure controlled by the spin-orbit interaction", *Appl. Phys. Lett.*, 88, 223102 (2006) [Selected for the June 12, 2006 issue of *Virtual Journal of Nanoscale Science & Technology*] (IF: 4.127).

79. **C. H. Yang, W. Xu, Z. Zeng, F. Lu, and C. Zhang**, "Optical spectrum of a two-dimensional hole gas in the presence of the Rashba spin-orbit interaction", *Phys. Rev. B*, 74, 075321 (2006) [Selected for the August 28, 2006 issue of *Virtual Journal of Nanoscale Science & Technology*] (IF: 3.185).

80. **C.H. Yang, W. Xu, Z. Zeng, C.S. Tang, and C. Zhang**, "Exchange-enchanced spin-splitting in a two-dimensional electron gas in the presence of the Rashba spin-orbit interaction", *Physica E*, 32, 363 (2006) (IF: 0.946).

81. **J. Yao, S. Bewlay, K. Konstantinov, V.A. Drozd, R.S. Liu, X.L. Wang, H.K. Liu, and G.X. Wang**, "Characterisation of olivine-type $LiMn_xFe_{1-x}PO_4$ cathode materials"**,** *Journal of Alloys and Compounds*, 425, 362-366 (2006) (IF: 1.562).

82. **W.K. Yeoh, J.H. Kim, J. Horvat, S.X. Dou, and P. Munroe**, "Improving flux pinning of MgB_2 by carbon nanotube doping and ultrasonication", *Supercond. Sci. Technol.*, 19, L5-L8 (2006) (IF: 1.896).

83. **W.K. Yeoh, J.H. Kim, J. Horvat, X. Xu, M. J. Qin, S.X. Dou, C.H. Jiang, T. Nakane, H. Kumakura, and P. Munroe**, "Control of nano Carbon substitution for enhancing the critical current density in MgB_2", *Supercond. Sci Technol.*, 19, 596-599 (2006) (IF: 1.896).

84. **Y. Yoo, J.H. Kim, K. Chung, J. Ko, G. Hong, H. Lee, J. Kim, and S.X. Dou,** "Chemical modification of precursor solution for long length YBCO coated conductor fabrication," *Journal of Physics: Conference Series,* 43, 111-214 (2006).

85. **L. Yu, J. Cao, and C. Zhang**, "Optical absorption coefficients in two-dimensional semiconductors under a strong magnetic field", *J. Appl. Phys.*, 99, 123706 (2006) (IF: 2.498).

86. **L. Yuan, Z.P. Guo, K. Konstantinov, H.K. Liu, and S.X. Dou,** "Nano-structured spherical porous SnO_2 anodes for lithium-ion batteries", *Journal of Power Sources,* 159, 345-348 (2006) (IF: 2.770).

87. **L. Yuan, Z. P. Guo, K. Konstantinov, P. Munroe, and H. K. Liu,** "Spherical clusters of NiO nanoshafts for Lithium ion battery anodes", *Electrochemical and Solid State Letters*, 9, A524 (2006) (IF: 1.970) [Selected for Sept 25, 2006 issue of *Virtual Journal of Nanoscale Science & Technology*].

88. **L. Yuan, Z.P. Guo, K. Konstantinov, J.Z. Wang, and H.K. Liu,** "In-situ fabrication of spherical porous Tin oxide via a spray pyrolysis technique", *Electrochimica Acta*, 51, 3680 (2006) (IF 2.453).

89. **C. Zhang, Z. Ma, and W. Xu**, "Frequency-dependent Hall effect in spintronic systems under zero magnetic field", *Physica E*, 34, 321 (2006) (IF: 0.946).

90. **D.Y. Zhang, Z.F. Ma, G.X. Wang, K. Konstantinov, X. Yuan, and H.K. Liu,** "Electro-oxidation of ethanol on Pt-$W0_3$/C electrocatalyst", *Electrochemical and Solid-State Letters*, 9, 9, A423-A426 (2006) (IF: 1.970).

91. **Q. Zhang, H. Yang, C. Zhang, and Z. Ma,** "Shot noise and conductance in metallic carbon nanotubes in the presence of correlated defects", *Phys. Rev. B*, 74**,** 235438 (2006) (IF: 3.185).

92. **Y. Zhang, X. Yao, J. Lian, L. Wang, A. Li, H.K. Liu, H. Yao, Z. Han, L. Li, Y. Xu, and D. Shi,** "In situ temperature optical microscopy study of phase evolution in $YBa_2Cu_3O_{7-\delta}$ films prepared by a fluorine-free sol-gel route", *Physica C*, 436, 62-67 (2006) (IF: 0.948).

93. **G.P. Zhao and X.L. Wang** "Nucleation, pinning, and coercivity in magnetic nanosystems: an analytical micromagnetic approach**",** *Physical Review B (Condensed Matter and Materials Physics),* 74, 12409-1-4 (2006) (IF: 3.185).

94. **Y. Zhao, S.X. Dou, M. Ionescu, and P. Munroe, "**Significant improvement of activation energy in MgB_2/Mg_2Si multilayer films", *Applied Physics Letters,* 88, 12502-1-3 (2006) (IF: 4.127).

95. **Y. Zhao, M.J. Qin, S.X. Dou, M. Ionescu, and P. Munroe, "**Transport properties of multilayered MgB_2/Mg_2Si superconducting thin film", *Journal of Applied Physics,* 99, 08M503 (2006) (IF: 2.498).

96. **Z.W. Zhao, Z.P. Guo, J. Ding, D. Wexler, Z.F. Ma, D.Y. Zhang, and H.K. Liu,** "Novel ionic liquid supported synthesis of Platinum-based electrocatalysts on multiwalled Carbon nanotubes", *Electrochemistry Communications*, 8, 245 (2006) (IF 3.388).

97. **S.M. Zhu, X.L. Wang, W. Huang, D. Yan, H. Wang, and D. Zhang** "Growth of width-controlled nanowires of MnO_2 from mesoporous carbon and investigation of their properties", *Journal of Materials Research*, 21, 2847-2854 (2006).

Summary:
Total of 97 papers
52 papers in journals with IF great than 2 (54%)
19 papers in journals with IF greater than 4 (20%)

Conference Papers

R E M Vickers, R., R A Lewis, P Fisher, and Y J Wang, "Zeeman Spectra of Boron in Germanium at High Fields", Proceedings of 16th AIP