

Institute for Superconducting and Electronic Materials

2003 Refereed Publications

Book Chapters

- S.X. Dou "High T_c conductor processing techniques", *Handbook of Superconducting Materials*, (421-448) ed. D Cardwell, University of Cambridge, UK; D. Ginley, NREL, USA, IoP, (2003)
- J. Horvat, "Interaction of Superconductor with Magnetic Sheath as a way for improvement of critical current in MgB_2/Fe superconductor" *Focus on Superconductivity*, Ed: Barry P Martins, Nova Publishing, 175-190 (2003)
- P.N. Mikheenko, K.K. Uprety and S.X. Dou, "High Temperature Superconductors, C2. BSSCO", *Handbook of Superconducting Materials*, (947-992), ed. D Cardwell, University of Cambridge, UK; D. Ginley, NREL, USA, IoP (2003)

Journal Articles

- J.H. Ahn, G.X. Wang, H.K. Liu and S.X. Dou "Nanoparticle-dispersed PEO polymer electrolytes for Li batteries" *J. Power Sources* **119-121**, 422-426 (2003)
- J.H. Ahn, G.X. Wang, J. Yao, H.K. Liu and S.X. Dou "Tin-based composite materials as anode materials for Li-ion batteries" *J. Power Sources* **119-121**, 45-49 (2003)
- W.M. Chen, W. Chen, S.H. Zhou, H.Y. Ling and S.S. Jiang "Pressing processing diminishes outgrowth and bridging for $AgMg/Bi-2223$ tapes" *J. of Supercond.* **16, 3**, (495-499) (2003)
- Y. Chen, G.X. Wang, K. Konstantinov, J.H. Ahn, H.K. Liu and S.X. Dou "Studies of the electrochemical properties of nanosize Co_3O_4 oxide as an anode material for lithium-ion batteries" *J. Metastable and Nanocrystalline Mat.* **15- 16**, 625-628 (2003)
- Y. Chen, G.X. Wang, K. Konstantinov, H.K. Liu and S.X. Dou "Synthesis and characterisation of $LiCo_xMn_yNi_{1-xy}O_2$ as a cathode material for secondary lithium batteries" *J. Power Sources* **119-121**, 184-188 (2003)
- E.W. Collings, E. Lee, M.D. Sumption, M. Tomsic, X.L. Wang, S. Soltanian and S.X. Dou "Continuous- and batch processed MgB_2/Fe strands – transport and magnetic properties" *Physica C* **386**, 555-559 (2003)
- F. Darmann, S.X. Dou and C. Cook "Determination of the AC losses of Bi-2223 HTS coils at 77K at power frequencies using a mass boil-off calorimetric technique" *IEEE Trans. On Appl. Supercond.* **13, 1** 1-6 (2003)
- S.X. Dou, J. Horvat, S. Soltanian, X.L. Wang, M.J. Qin, S.H. Zhou, H.K. Liu and P.G. Munroe "Transport critical current density in Fe-sheathed nano-SiC doped MgB_2 Wires" *IEEE Trans. On Appl. Supercond.* **13, 2** 3199-3202 (2003)
- S.X. Dou, A.V. Pan, S. Zhou, M. Ionescu, X.L. Wang, J. Horvat, H.K. Liu and P.R. Munroe "Superconductivity, critical current density, and flux pinning in $MgB_{2-x}(SiC)_{x/2}$ superconductor after SiC nanoparticle doping" *J. Appl. Phys.* **94, 3**, 1850-1856 (2003)
- S.X. Dou, W.K. Yeoh, J. Horvat and M. Ionescu "Effect of carbon nanotube doping on critical current density of MgB_2 superconductor" *App. Phys. Lett.* **83, 24** 4996-4998 (2003)
- P. Fisher, R.E.M. Vickers and K. Ishida "Coulomb related Landau spectra of axial and double acceptors in germanium" *Phys. Stat. Sol.* **0,2**, 683-686 (2003)
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- M. Fujita, T. Toyoda, J.C. Cao and C. Zhang "Induced charge-density oscillation under a quantizing magnetic field and intense terahertz radiation" *Phy. Rev. B* **67**, 075105-1 – 0751505-5 (2003)
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- C. Freeth and R.A. Lewis "Far-infrared laser magnetospectroscopy of Donors and Acceptors in Ge" *Proc. 27th Annual A&NZIP Cond. Matt. & Mat. Meeting*, 4-7/2/2003, Wagga Wagga, Australia (2003)
- C. Freeth and R.A. Lewis "Selective laser excitation spectroscopy of gallium and phosphorous in germanium" *Conf. on Optoelectronic and Microelectronic Materials and Devices*, 11-13/12/2002, Ed: M. Gal, IEEE Publishing, 447-450 (2003)
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