2009 Publications List

Scholarly books:

1. **O. V. Shcherbakova, A. V. Pan, S. X. Dou,** "Magnesium diboride superconductors: development and properties", Published by VDM Verlag Dr. Muller Aktiengesellschaft & Co. KG (2009).

Journal Articles:

1. **J. H. Ahn, G. X. Wang, and Y. J. Kim,** "Facile synthesis of tin oxide nanofibres", *Current Applied Physics* **9**(2), E176-E179 (2009)

2. **J. H. Ahn, S. Oh, X. L. Wang, and S. X. Dou,** "Infiltration of magnesium in porous boron skeletons", *International Journal of Modern Physics B* **23**(17), 3503 – 3508 (2009).

3. **G. A. Alvarez, X. L. Wang, T. Puzzer, G. Peleckis, and S. X. Dou,** "Spin wave scattering and interface magnetism in superconducting-ferromagnet-superconducting hybrid structures", *Journal of Applied Physics* **105**, 07E326 (2009).

4. **E. Babic, M. Jercinovic, J. H. Kim, and S. X. Dou,** "Vortex pinning in CNT-doped MgB_2 superconductor", *Optoelectrics and Advanced Materials – Symposia* **1**(3), 455-458 (2009).

5. **L. J. Bignell and R. A. Lewis,** "Reflectance studies of candidate THz emitters", *Journal of Materials Science: Materials in Electronics* **20**, S326-S331 (2009).

6. **C. Z. Chen, C. B. Cai, L. Peng, B. Gao, F. Fan, Z. Y. Liu, M. Lu, R. Zeng, and S. X. Dou "**Flux pinning of stress-induced magnetic inhomogeneity in the bilayers of $YBa_2Cu_3O_{7-delta}/La_{0.67}Sr_{0.33}MnO_{3-delta}$", *Journal of Applied Physics* **106**, 093902 (2009)**.**

7. **J. Chen, J. Z. Wang, A. I. Minett, Y. Liu, C. Lynam, H. K. Liu, and G. G. Wallace**, "Carbon nanotube network modified carbon fibre paper for Li-ion batteries", *Energy & Environmental Science* **2**(4), 393-396 (2009).

8. **M. Chen, J. Zang, D. Q. Xiao, C. Zhang, and F. Liu,** "Nanopumping molecules via a carbon nanotube", *Nano Research* **2**(12), 938-944 (2009).

9. **S. K. Chen, X. Xu, J. H. Kim, S. X. Dou, and J. L. MacManus-Driscoll,** "Determination of the relative influences of carbon doping and disorder on field and temperature dependent critical current density of MgB_2", *Superconductor Science & Technology* **22(**12), 125005 (2009).

10. **Z. X. Cheng, X. L. Wang, G. Alvarez, S. X. Dou, S. J. Zhang, and T. R. Shrout,** "Magnetic glassy behavior in ferroelectric relaxor type solid solutions: Magnetoelectric relaxor", *Journal of Applied Physics* **105**(7), 07D902 (2009).

11. **S. Y. Chew, S. H. Ng, J. Z. Wang, P. Novak, F. Krumeich, S. L. Chou, J. Chen, and H. K. Liu,** "Flexible free-standing carbon nanotube films for model lithium-ion batteries", *Carbon* **47**(13), 2976-2983 (2009).

12. **S. Y. Chew, T. J. Patey, O. Waser, S. H. Ng, R. Buchel, A. Tricoli, F. Krumeich, J. Wang, H. K. Liu, S. E. Pratsinis, and P. Novak,** "Thin nanostructured $LiMn_2O_4$ films by

flame spray deposition and in situ annealing method", *Journal of Power Sources Volume* **189**(1), 449-453 (2009).

13. **C. Choi, S. H. Kim, K. Y. Choi, S. I. Lee, X. H. Chen, and X. L. Wang,** "The fluctuation effect of $BaFe_{1.8}Co_{0.2}As_2$ single crystals from reversible magnetization", *Superconductor Science & Technology* **22**(10), 105016 (2009).

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15. **S. L. Chou,** "High precision charger to investigate spinal $Li_{1+x}Mn_{2-x}O_4$ at elevated temperatures", *Journal of Electrochemical Society Interface Pages* **1-2** (2009).

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17. **K. C. Chung, Y. K. Kim, X. L. Wang, and S. X. Dou,** "Texture development of CeO_2 buffer layer and its effect on superconducting MOD-YBCO films", *Journal of the Korean Institute of Metals and Materials* **47**(10), 681-685 (2009).

18. **K. C. Chung, J. M. Yoo, Y. K. Kim, X. L. Wang, and S. X. Dou,** "The effect of water pressure on the texture and morphology of MOD-YBCO films on buffered metal substrates", *Superconductor Science and Technology* **22**(2), 025007 (2009).

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20. **X. L. Deng, Y. Li, M. Y. Zhu, H. M. Jin, Z. Wang, Z. Z. Zhu, and H. K. Liu,** "Synthesis of nano-crystalline Co_3O_4 particles by hydrothermal method under pulsed magnetic field", *International Journal of Modern Physics B* **23**(17), 3602-3607 (2009).

21. **L. Fang, X. Zu, C. Liu, Z. Li, G. Peleckis, S. Zhu, H. K. Liu, and L. Wang,** "Microstructure and magnetic properties in $Sn_{1\_x}Fe_xO_2$ (x=0.01,0.05,0.10) nanoparticles synthesized by hydrothermal method", *Journal of Alloys and Compounds* **491**, 679-683 (2009).

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