

ISEM Publications 2008

Books

1. **Yeoh, W., Horvat, J., Kim, J. and Dou, S. X.**, "Improvement of vortex pinning in MgB₂", US, UK, Canada, Germany, France: Nova Science Publishers, (2008).

Refereed Journal Articles

2. **Beaven D. J. D., Fulcher J. A., Yang C. H., Zeng Z., Xu W. and Zhang C.**, "Photo absorption in spintronic multilayer systems", *Physica E*, **40**, 6, 2138-2140, (2008).
3. **Cheng Z. X., Wang X. L., Dou S. X., Kimura H., and Ozawa K.**, "Enhancement of ferroelectricity and ferromagnetism in rare earth element doped BiFeO₃", *Journal of Applied Physics*, **104**, 116109, (2008).
4. ***Cheng Z. X., Wang, X. L., Kimura H., Ozawa K. and Dou S. X.**, "Nb and La co-doped multiferroic BiFeO₃ thin films on oxide bottom electrodes by pulsed laser ablation", *Applied Physics Letters*, **92**, 092902-092904, (2008).
5. ***Cheng Z. X. and Wang X. L.**, "Optical property and electronic band structure of a piezoelectric compound Ga₃PO₇ studies by the first-principles calculation", *Applied Physics Letters*, **92**, 261915, (2008).
6. **Cheng Z. X., Wang X. L., Kimura H., Ozawa K. and Dou S. X.**, "Significant improvement in the ferroelectric properties through La and Nb co-doping into BiFeO₃ thin films", *Physical Review B*, **77**, 092101, (2008)
7. **Chew S. Y, Sun J. Z., Wang J. Z., Liu H. K., Forsyth M. and MacFarlane D.**, "Lithium-polymer battery based on an ionic liquid-polymer electrolyte composite for room temperature applications", *Electrochimica Acta*, **53**, 6460-6463, (2008).
8. **Chou S. L., Wang J. Z., Liu H. K. and Dou S. X.**, "Electrochemical deposition of porous Co(OH)₂ nanoflake films on stainless steel mesh for flexible supercapacitors", *Journal of the Electrochemical Society*, **155**, 12, A926-A929, (2008).
9. **Chou S. L., Wang J. Z., Liu H. K. and Dou S. X.**, "Electrochemical deposition of porous Co₃O₄ nanostructured thin film for lithium-ion battery", *Journal of Power Sources*, **182**, 359-364, (2008).
10. **Chou S. L., Wang J. Z., Chew S., Liu H. K. and Dou S. X.**, "Electrodeposition of MnO₂ nanowires on carbon nanotube paper as free-standing, flexible electrode for supercapacitors", *Electrochemistry Communications*, **10**, 11, 1724-1727, (2008).
11. ***Chou S. L., Wang J. Z., Sun J., Wexler D., Forsyth M., Liu H. K., MacFarlane D. and Dou S. X.**, "High capacity, safety, and enhanced cyclability of lithium metal battery using a V₂O₅ nanomaterial cathode and room temperature ionic liquid electrolyte", *Chemistry of Materials*, **20**, 22, 7044-7051, (2008).

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13. **Gao F., Wang G. X. and Zhang C.,** “Strong photon-mixing of terahertz waves in semiconductor quantum wells induced by Rashba spin-orbit coupling”, *Nanotechnology*, **19**, 465401, (2008).
14. **Gao F., Chen J., Dou S. X. and Zhang X. C.,** “Terahertz spectroscopy in pulsed laser deposited $\text{LaCa}_{0.7}\text{Mn}_{0.3}\text{O}_3/\text{MgO}$ thin films”, *Progress in Biomedical Optics and Imaging*, **6840**, 68401I, I8401-I8401 (2008).
15. **Gao F., and Mendis R.,** “THz time-domain spectroscopy of cesium iodide”, *Progress in Biomedical Optics and Imaging*, **6840**, 64801H-1, H8401-H8401, (2008).
16. **Ghorbani S. R., Wang X. L., Dou S. X., Lee Sung-IK, and Hossain M. S. A.,** “Flux-pinning mechanism in silicone-oil-doped MgB_2 : Evidence for charge-carrier mean free path fluctuation pinning”, *Physical Review B (Condensed Matter and Materials Physics)*, **78**, 184502-184506, (2008).
17. ***Glushenkov A. M., Stukachev V. I., Hassan M. F., Kuvshinov G. G., Liu H. K. and Chen Y.,** “A novel approach for real mass transformation from V_2O_5 particles to nanorods”, *Crystal Growth and Design*, **8** 10, 3661-3665, (2008).
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19. **Gou X. L., Wang G. X., Yang J., Park J. S., and Wexler D.,** “Chemical synthesis, characterisation and gas sensing performance of copper oxide nanoribbons”, *Journal of Materials Chemistry*, **18**, 9, 965-969, (2008).
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21. **Guo Z. P., Han D. M., Wexler D., Zeng R. and Liu H. K.,** “Polyoxometallate-stabilized platinum catalysts on multi-walled carbon nanotubes for fuel cell applications”, *Electrochimica Acta*, **53**, 22, 6410-6416, (2008).
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25. **Horvat J., Yeoh W. K., Kim J. H. and Dou S. X.**, “Transport and magnetic critical current in superconducting MgB₂ wires”, *Superconductor Science and Technology*, **21**, 065003-065003-6, (2008).
26. **Ionescu M., Zhao Y., Siegele R., Cohen D. D., Stelcer E. and Prior M.**, “Heavy ion ToF analysis of oxygen incorporation in MgB₂ thin films”, *Nuclear Instruments & Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms*, **266**, 8, 1701-1704, (2008).
27. **Jiang C. H., Xu X. and Dou S. X.**, “Properties of pure and carbon sphere doped MgB₂ prepared from low grade boron powders”, *Superconductor Science and Technology*, **21**, 6, (2008).
28. **Jiang C. H., Dou S. X., Cheng Z. X. and Wang X. L.**, “Light carbon doping by oxygen-free paraffin wax to enhance the current density of MgB₂ in the entire field regime”, *Superconductor Science and Technology*, **21**, 065017, (2008).
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33. **Lewis R. A.**, “Never a dull moment”, *American Journal of Physics*, **76**, 7, 607, (2008).
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41. **Liu M., Suo H. L., Ye S., Shi D. Q., Zhao Y., Tang X., Ma L., Li Q., Wang L., Zhou M. L and Dou S. X.**, “Preparation and properties of YSZ-doped YBCO films grown by the TFA-MOD method”, *Superconductor Science & Technology*, **21**, 11, 115012, (2008).
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43. **Ng S. H., Chew S. Y., Santos D. I., Chen J., Wang J. Z., Dou S. X. and Liu H. K.**, “Hexagonal-shaped tin glycolate particles: A preliminary study of their suitability as li-ion insertion electrodes”, *Chemistry - An Asian Journal*, **3**, 5, 854-861, (2008).
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100. **Hossain M. S., Kim J. H., Xu X., Wang X. L. and Dou S. X.**, “Effect of sintering temperature on structural defects and superconducting properties in $\text{MgB}_2 + \text{C}_4\text{H}_6\text{O}_5$ ”, *Proceedings of the 8th European Conference on Applied Superconductivity (EUCAS 2007)*, (Brussels, Belgium), *Journal of Physics: Conference Series*, **96**, 012066, (2008).
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