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Gender: Male
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EDUCATION

Aug 2004 Ph. D., Surface Physics, Institute of Physics, Chinese Academy of Sciences, Beijing, P. R. China.

Defense topic: "Growth, Manipulation and Quantum size effect of Pb/Si(111) nanostructures".
Advisor: Professor Qi-Kun Xue (qkxue@aphy.iphy.ac.cn).

Jun 1999 B. S., Condensed Matter Physics, Department of Physics, Peking University, Beijing, P. R. China

Thesis title: "Wannier-Stark Ladder and Berry Phase in Solid State".
Advisor: Professor Rushan Han (rshan@pku.edu.cn).

EMPLOYMENTS

Aug 2006 - present	Postdoctoral researcher at John M. White group (jmwhite@mail.utexas.edu), The University of Texas at Austin.
July 2005 - Aug 2006	Postdoctoral researcher at Paul S. Weiss (stm@psu.edu) group, The Pennsylvania State University.
Aug 2004 - Jun 2005	Research Associate at Qi-Kun Xue group, Institute of Physics, Chinese Academy of Sciences.

RESEARCH INTERESTS

Surface physics, Surface chemistry, Nanoscience, Nanotechnology.

Scanning Tunneling Microscopy (STM), Atomic Force Microscopy (AFM), etc.

PUBLICATIONS

1. S.-C. Li, J.-F. Jia, Q.-K. Xue, Y. Han, and F. Liu, "An effective method for determining the ehrlich-schwoebel step-edge barrier in epitaxial growth of thin films", submitted.
2. S.-C. Li, J.-F. Jia, X. Ma, Q.-K. Xue, Y. Han and F. Liu, "Fabricating artificial nano-wells with tunable size and shape by using scanning tunneling microscopy", *App. Phys. Lett.* In press
3. S.-C. Li, X. Ma, J.-F. Jia, Y.-F. Zhang, D. Chen, Q. Niu, F. Liu, P. S. Weiss, and Q.-K. Xue, "Influence of quantum size effects on Pb island growth and diffusion barrier oscillations", *Phys. Rev.* B **74**, 075410 (2006).
4. S.-C. Li, J.-F. Jia, R.-F. Dou, Q.-K. Xue, I. G. Batyrev, and S.-B. Zhang, "Borderline magic clustering: The Fabrication of Tetravalent Pb Cluster Arrays on Si(111)-7×7 Surfaces", *Phys. Rev. Lett.* **93**, 116103 (2004).
5. Y. Han, J. Y. Zhu, F. Liu, S.-C. Li, J.-F. Jia, Y.-F. Zhang, and Q.-K. Xue, "Coulomb Sink: A Novel Coulomb Effect on Coarsening of Metal Nanoclusters on Semiconductor Surfaces", *Phys. Rev. Lett.*

93, 106102 (2004).

6. C.-S. Jiang, S.-C. Li, H.-B. Yu, D. Eom, X.-D. Wang, Ph. Ebert, J.-F. Jia, Q.-K. Xue, and C.-K. Shih, "Building Pb Nanomesas with Atomic-Layer Precision", *Phys. Rev. Lett.* **92**, 106104 (2004).
7. J.-F. Jia, X. Liu, S.-C. Li, J.-Z. Wang, J.-L. Li, H. Liu, M.-H. Pan, R.-F. Dou and Q.-K. Xue, "Artificial metal nanocluster crystals", *Mod. Phys. Lett. B* **16**, 889 (2002).
8. J.-F. Jia, J.-L. Li, X.-J. Liang, X. Liu, J.-Z. Wang, H. Liu, R.-F. Dou, M.-J. Xu, M.-H. Pan, S.-C. Li, and Q.-K. Xue, "Spontaneous fabrication of periodic identical nanocluster arrays by magic clustering process on nanostructured template", *J. Chin. Electron Microscopy Soc.* **21**, 270 (2002).
9. N. Jiang, B. Jiang, J. C. H. Spence, R.-C. Yu, S.-C. Li, C.-Q. Jin, "Anisotropic excitons in MgB_2 from orientation-dependent electron-energy-loss spectroscopy", *Phys. Rev. B* **66**, 172502 (2002).
10. C.-Q. Jin, S.-C. Li, R.-C. Yu, F.-Y. Li, R.-J. Wang, J.-L. Zhu, Z.-X. Liu and L.-C. Chen, "Property studies of MgB_2 superconductor directly synthesized using high pressure", *J. Phys.: Condens. Matter.* **14**, 10771 (2002).
11. C.-Q. Jin, S.-C. Li, J.-L. Zhu, F.-Y. Li, Z.-X. Liu, and R.-C. Yu, "High critical current density of a MgB_2 bulk superconductor high-pressure synthesized directly from the elements", *J. Mater. Res.* **17**, 525 (2002).
12. F.-Y. Li, R.-J. Wang, S.-C. Li, L.-C. Chen, J.-L. Zhu, Z.-X. Liu, R.-C. Yu, and C.-Q. Jin, "Ultrasound studies of MgB2 superconductor under hydrostatic pressure", *Phys. Rev. B* **65**, 132517 (2002).
13. Z.-X. Liu, C.-Q. Jin, J.-Y. You, S.-C. Li, J.-L. Zhu, R.-C. Yu, F.-Y. Li and S.-K. Su, "The increase in Tc for MgB_2 superconductor under high pressure", *J. Phys.: Condens. Matter.* **14**, 11301 (2002).
14. X. Kong, Y. Q. Wang, H. Li, X. F. Duan, R.-C. Yu, S.-C. Li, F.-Y. Li, C.-Q. Jin, "Electron energy-loss spectroscopy characterization of the boron p-like density of states in MgB_2", *Appl. Phys. Lett.* **80**, 778 (2002).
15. Z.-X. Liu, C.-Q. Jin, J.-Y. You, S.-C. Li, J.-L. Zhu, R.-C. Yu, F.-Y. Li, S.-K. Su, "Enhanced MgB_2 superconductivity under high pressure", *Chin. Phys. Lett.* **19**, 120 (2002).
16. S.-C. Li, R.-J. Wang, F.-Y. Li, Z.-X. Liu, J.-L. Zhu, R.-C. Yu, C.-Q. Jin, "Ultrasonic Properties of the MgB_2 Superconductor", *Chin. Phys. Lett.* **18**, 1369 (2001).
17. R.-C. Yu, S.-C. Li, Y.-Q. Wang, X. Kong, J.-L. Zhu, F.-Y. Li, Z.-X. Liu, X.-F. Duan, Z. Zhang, C.-Q. Jin, "EELS studies of MgB_2 superconductor obtained under high pressure", *Physica C* **363**, 184 (2001).
18. H. D. Yang, J.-Y. Lin, H. H. Li, F. H. Hsu, C. J. Liu, S.-C. Li, R.-C. Yu, and C.-Q. Jin, "Order parameter of MgB_2: A fully gapped superconductor", *Phys. Rev. Lett.* **87**, 167003 (2001).
19. S.-C. Li, J.-L. Zhu, R.-C. Yu, F.-Y. Li, Z.-X. Liu, C.-Q. Jin, "High-pressure Synthesis of MgB_2 Superconductor with Tc Above 39K", *Chin. Phys.* **10**, 338 (2001).

AWARDS AND HONORS

Elected to the 54th Meeting of Nobel Laureates and Students in Lindau, Germany, 2004.

Excellent Student Prize, Institute of Physics, Chinese Academy of Sciences, 2003.

Excellent Student Prize, Institute of Physics, Chinese Academy of Sciences, 2002.

Chinese Student Award, IN JOINT the 18th International Conference on High Pressure Science and

Technology & the 11th High Pressure Conference of China, 2001.

TECHNICAL SKILLS

Scanning Tunneling Microscopy (STM) and Atomic Force Microscopy (AFM).

Molecular Beam Epitaxy (MBE) technique.

Cryogenic technique.

Ultrahigh Vacuum (UHV) technique.

Angle-Resolved Ultraviolet Photoelectron Spectroscopy (AR-UPS).

High-Pressure synthesis.

REFERENCES

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